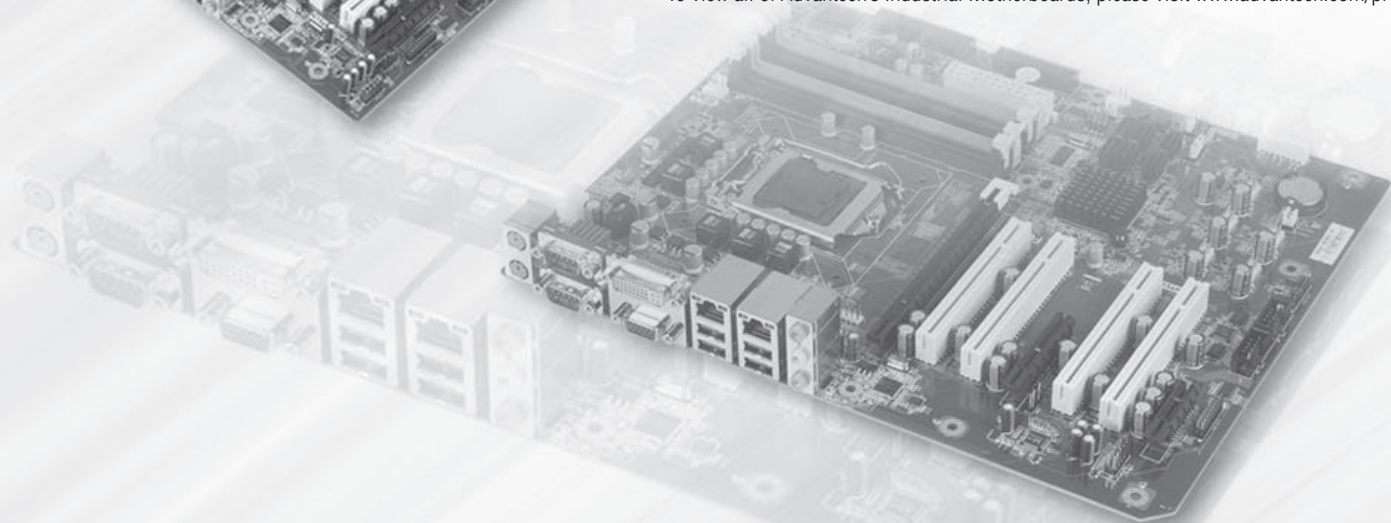
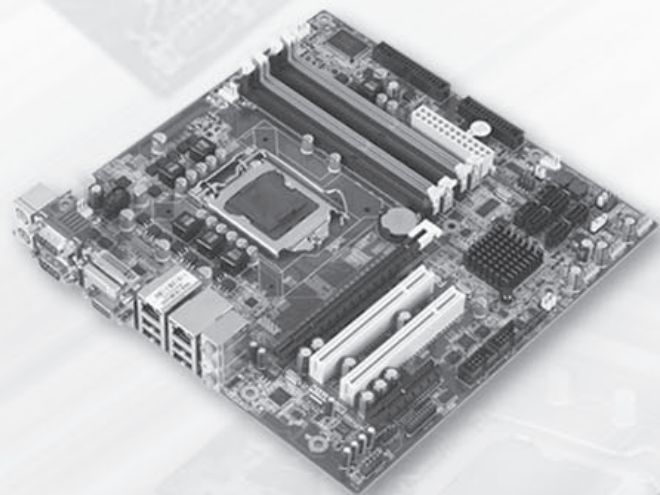
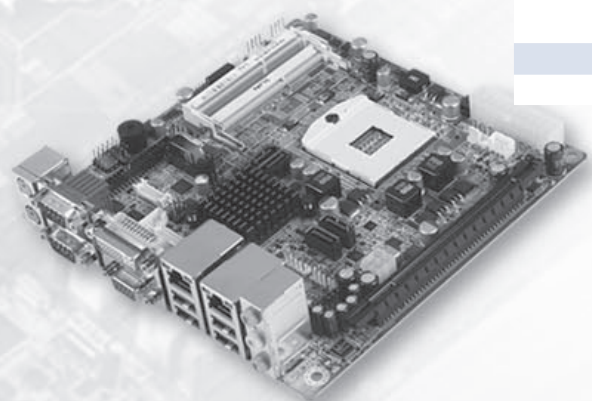


## Industrial Motherboards



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<b>AIMB-580</b>	Intel Core i7/i5/i3/Pentium with VGA/DVI, 4 x COM, Dual LAN	<b>10-23</b>
<b>AIMB-581 (New)</b>	LGA1155 Intel Core i7/i5/i3/ MicroATX with VGA/DVI/LVDS, 4 x COM, and Dual LAN	<b>10-24</b>
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<b>AIMB-769 (New)</b>	LGA775 Intel Core 2 Quad ATX with VGA, 2 x COM, LAN	<b>10-28</b>
<b>AIMB-780</b>	LGA1156 Intel Core i7/i5/i3/Pentium/Xeon ATX with DVI/VGA, 4 x COM, Dual LAN, DDR3	<b>10-29</b>
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To view all of Advantech's Industrial Motherboards, please visit [www.advantech.com/products](http://www.advantech.com/products).

# Mini-ITX Motherboards

NEW

NEW

## Selection Guide

Model Name Form Factor		AIMB-210 Mini-ITX	AIMB-212 Mini-ITX	AIMB-213 Mini-ITX	AIMB-221 Mini-ITX	AIMB-222 Mini-ITX
Processor System	CPU	Intel Atom N270	Intel Atom N450/D510	Intel Atom N455/D525	AMD Turion TL-62/AMD Sempron 3700+	AMD Mobile Athlon™ II Neo/Turion™ II Neo
	Socket	FCBGA	FCBGA	FCBGA	S1g1 Socket	FCBGA
	Max. Speed	1.6 GHz	1.66 GHz	1.66/1.8 GHz	2.1 GHz/2.0 GHz	2.2 GHz
	Front Side Bus	533 MHz	-	-	800 MHz/800 MHz	800 MHz
	L2 Cache	512 KB	512 KB/1 MB	512 KB/1 MB	1 MB/512 KB	2 MB
	Chipset	Intel 945GSE + ICH7M	Intel ICH8M	Intel ICH8M	AMD M690E + SB600	AMD RS785E + SB820
Expansion Slot	BIOS	Award 16 Mbit, SPI	AMI 16 Mbit, SPI	AMI 16 Mbit, SPI	Award 4 Mbit, FWH	AMI 16 Mbit, SPI
	PCI	1	1	1	1	-
	MINI PCI	-	-	-	1	-
	PCIe	-	Mini-PCIe, 1 slot	Mini-PCIe, 1 slot	-	Mini-PCIe, 1 slot PCIe x16, 1 slot
Memory	Technology	Single channel DDR2 533 MHz	Single channel DDR2 667 MHz	Single channel DDR3 800 MHz	Dual channel DDR2 533/667/800 MHz	Dual channel DDR3 1066 MHz
	Max. Capacity	2 GB	2 GB	2/4 GB	4 GB	4 GB
	Socket	1 x 200-pin SODIMM	1 x 200-pin SODIMM	2 x 204-pin SODIMM	2 x 200-pin SODIMM	2 x 204-pin SODIMM
Graphics	Controller	Intel GMA 950	Embedded Gen3.5+ GFX Core, 200/400-MHz render clock frequency for N450/D510	Embedded Gen3.5+ GFX Core, 200/400-MHz render clock frequency for N455/D525	Integrated ATI Radeon X1250 based GFX Engine	Integrated ATI Radeon HD4200 serial
	VRAM	Shared system memory up to 224 MB	Shared system memory up to 224 MB SDRAM	Shared system memory up to 224 MB SDRAM	Shared system memory up to 512 MB	Shared system memory up to 128 MB SDRAM
	LCD	LVDS1: Dual channel 36-bit LVDS LVDS2: Dual channel 48-bit LVDS (F Version)	Supports 18-bit single channel	Supports 18/24-bit single channel	Dual channel 36/48-bit LVDS	Dual channel 36/48-bit LVDS
	TV-Out	1	-	-	-	-
	HDMI	-	-	-	1	1
	DVI	-	-	1	-	1
	Dual Display	CRT + LVDS, CRT + TV-Out, LVDS + TV-Out	CRT + LVDS, supports extended mode and clone mode	CRT + LVDS, CRT + DVI, supports extended mode and clone mode	CRT + LVDS; CRT + HDMI; HDMI + LVDS	CRT + LVDS; CRT + HDMI; CRT+DVI; HDMI + LVDS; LVDS + DVI
Ethernet	Interface	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps
	Controller	Dual Realtek RTL8111C	LAN1: Intel 82567V, LAN2: Intel 82583V	LAN1: Intel 82567V, LAN2: Intel 82583V	Dual Realtek RTL8111C	Dual Realtek RTL8111DL
	Connector	RJ-45 x 2	RJ-45 x 2	RJ-45 x 2	RJ-45 x 2	RJ-45 x 2
TPM		Yes (F Version)	-	Optional	Optional	-
SATA	Max Data Transfer Rate	300 MB/s	300 MB/s	300 MB/s	300 MB/s	300 MB/s
EIDE	Channel	2	2	3	4 (SW RAID 0, 1)	2
	Mode	EIDE (Ultra DMA 100)	-	-	EIDE (Ultra DMA 133)	-
Rear I/O	Channel	1	-	-	1	-
	VGA/DVI/HDMI	1/-/-	1/-/-	1/1/-	1/-/1	1/1/1
	Ethernet	2	2	2	2	2
	USB	4	4	4	4	4
	Audio	Mic-in, Line-in, Line-out	Mic-in, Line-in, Line-out	Mic-in, Line-in, Line-out	Mic-in, Line-in, Line-out	Mic-in, Line-in, Line-out
	Parallel	-	-	-	-	-
	Serial	3 (2 x RS-232; 1 x RS-232/422/485)	3 (2 x RS-232; 1 x RS-232/422/485)	2 (1 x RS-232; 1 x RS-232/422/485)	2 (1 x RS-232; 1 x RS-232/422/485)	2 (RS-232)
	PS/2	2	-	-	2	2
Internal Connector	LVDS & Inverter	1	1	1	1	1
	TV-Out	1	-	-	-	-
	DVI	-	-	1	-	1
	USB	4	4	4	4	4
	Serial	3 (RS-232)	3 (RS-232)	4 (1 x RS-232, supplies 5 V & 12 V)	4 (RS-232)	2 (2 x RS-232)
	Parallel	1	-	-	1	-
	IDE	1	-	-	1	-
	SATA	2	2	3	4	2
	CompactFlash	1	1	1	1	1
	GPIO	16-bit GPIO	8-bit GPIO	8-bit GPIO	8-bit GPIO	8-bit GPIO
Watchdog Timer	Output	System reset	System reset	System reset	System reset	System reset
	Interval	Programmable, 1 ~ 255 sec/min	Programmable, 1 ~ 255 sec/min	Programmable, 1 ~ 255 sec/min	Programmable, 1 ~ 255 sec/min	Programmable, 1 ~ 255 sec/min
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NEW



NEW

AIMB-223	AIMB-252	AIMB-256	AIMB-258	AIMB-262	AIMB-270	AIMB-272	AIMB-280
Mini-ITX	Mini-ITX	Mini-ITX	Mini-ITX	Mini-ITX	Mini-ITX	Mini-ITX	Mini-ITX
AMD G-series Dual Core/single core processor	Intel Pentium M/ Celeron M	Intel Core 2 Duo/ Celeron M	Intel Core 2 Duo/ Celeron M	Intel Core 2 Duo/ Pentium 4/ Pentium Dual-Core/Celeron D	Intel Core i7/i5/i3/ Pentium	Intel Core i7/i5/i3/ Celeron	Intel Core i7/i5/i3/ Pentium
FCBGA	µFC-PGA 478 Socket/ CPU on board	µFC-PGA 478 Socket/ CPU on board	µFC-PGA 478 Socket	LGA775	µFC-PGA 989 Socket	µFC-PGA 988 Socket	LGA1156
1.65 GHz/1.0 GHz	2.0 GHz/1.5 GHz	2.2 GHz/2.0 GHz	2.53 GHz/2 GHz	2.66 GHz/3.8 GHz/2.2 GHz/ 2.0 GHz	2.66 GHz/2.4 GHz/1.86 GHz	2.1 GHz/2.5 GHz/2.2GHz/1.6 GHz	2.8 GHz/2.66 GHz/3.33 GHz/3.06 GHz/2.8 GHz
-	533 MHz/400 MHz	800 MHz/533 MHz	1066 MHz/ 667 MHz	1066 MHz/800 MHz/533 MHz	-	-	-
512 KB/1 MB	2 MB/1 MB	4 MB/1 MB	6 MB/1 MB	3 MB/2 MB/1 MB/512 KB	4 MB/3 MB/2 MB	6 MB/3 MB/3MB/2 MB	8 MB/4 MB/ 3 MB
AMD eOntario + A55E	Intel 915GME/910GML + ICH6M	Intel GME965 + ICH8M	Intel GM45 + ICH9M	Intel 945GC + ICH7	Intel QM57	Intel QM67/HM65	Intel Q57
AMI 16 Mbit, SPI	Award 4 Mbit, FWH	AMI 16 Mbit, SPI	AMI 16 Mbit, SPI	Award 16 Mbit, SPI	AMI EFI 64 Mbit, SPI	AMI EFI 64 Mbit, SPI	AMI 64 Mbit, SPI
1	1	1	-	-	-	-	-
Mini-PCIe, 1 slot PCIe x1, 1 slot	-	-	PCIe x16, 1 slot	PCIe x16, 1 slot	Mini-PCIe, 1 slot, PCIe x16, 1 slot	Mini-PCIe, 1 slot, PCIe x16, 1 slot	PCIe x16, 1 slot
Single channel DDR3 1333 MHz	Dual channel DDR2 400/533 MHz	Dual channel DDR2 533/667 MHz	Dual channel DDR3 800/1066 MHz	Dual channel DDR2 533/667 MHz	Dual channel DDR3 800/1066/1333 MHz	Dual channel DDR3 1066/1333 MHz	DDR3 800/1066/1333 MHz
2 GB	2 GB	4 GB	4 GB	2 GB	8 GB	8 GB	4 GB
1 x 204-pin SODIMM	2 x 240-pin DIMM	2 x 200-pin SODIMM	2 x 204-pin SODIMM	2 x 200-pin SODIMM	2x 204-pin SODIMM	2x 204-pin SODIMM	1 x 240-pin DIMM
Integrated ATI Radeon RV7x0	Intel GMA 900	Intel GMA X3100	Intel GMA X4500	Intel GMA 950	Intel HD Graphics	Intel HD Graphics	Intel HD Graphics
-	Shared system memory up to 128 MB	Shared system memory up to 384 MB	Shared system memory up to 384 MB	Shared system memory up to 224 MB	1 GB maximum shared memory with 2 GB and above system memory installed	1 GB maximum shared memory with 2 GB and above system memory installed	1 GB maximum shared memory with 2 GB and above system memory installed
Dual channel 36/48-bit LVDS	LVDS 1: Dual channel 36-bit LVDS LVDS 2: Dual channel 48-bit LVDS	Dual channel 36/48-bit LVDS	Dual channel 36/48-bit LVDS	-	Dual channel 36/48-bit LVDS	Dual channel 36/48-bit LVDS	-
-	-	-	-	-	-	-	-
1	-	-	-	-	-	1	-
-	-	1	1	-	1	1	1
CRT + LVDS; CRT + HDMI; HDMI + LVDS	CRT + LVDS; Dual LVDS	CRT + LVDS; DVI + LVDS; CRT + DVI	CRT + LVDS; DVI + LVDS; CRT + DVI	-	CRT+LVDS, CRT+DVI, LVDS+DVI	CRT+LVDS, CRT+DVI, LVDS+DVI, HDMI+LVDS, HDMI+CRT, HDMI+DVI	CRT+DVI
10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps
Dual Realtek RTL8111DL	Dual Realtek RTL8111C	Dual Realtek RTL8111B	Dual Realtek RTL8111C	Realtek RTL8111C	LAN1: Intel 82577LM, LAN2: Intel 82583V	LAN1: Intel 82579LM, LAN2: Intel 82583V	LAN1: Intel 82578DM, LAN2: Intel 82583V
RJ-45 x 2	RJ-45 x 2	RJ-45 x 2	RJ-45 x 2	RJ-45 x 1	RJ-45 x 2	RJ-45 x 2	RJ-45 x 2
-	-	Optional	iTPM 2.0	-	-	Optional	-
600MB/s	150 MB/s	300 MB/s	300 MB/s	300 MB/s	300 MB/s	600 MB/s, 300 MB/s	300 MB/s
4	2	3	2	2	4	2, 4	4
-	EIDE (Ultra DMA 100)	EIDE (Ultra DMA 100)	-	-	-	-	-
-	1	1	-	-	-	-	-
1/-/1	1/-	1/1/-	1/1/-	1/-	1/1/-	1/-/1	1/1/-
2	2	2	2	1	2	2	2
4	4	4	4	4	4	4	4
Mic-in, Line-in, Line-out	Mic-in, Line-in, Line-out	Mic-in, Line-in, Line-out	Mic-in, Line-in, Line-out	Mic-in, Line-in, Line-out	Mic-in, Line-in, Line-out	Mic-in, Line-in, Line-out	Mic-in, Line-in, Line-out
-	1	-	-	-	-	-	-
2 (RS-232)	1 (RS-232/422/485)	2 (RS-232, supply 5 V & 12 V)	2 (1 x RS-232; 1 x RS-232/422/485)	2 (1 x RS-232; 1 x RS-232/422/485)	2 (RS-232)	2 (RS-232)	2 (RS-232)
1	2	2	2	2	2	2	2
1	2	1	1	-	1	1	-
-	-	-	-	-	-	-	-
-	-	-	-	-	1	1	-
4	4	6	4	2	4	4	4
4 (3 x RS-232; 1 x RS-232/422/485)	4 (RS-232)	2 (2 x RS-232, supplies 5 V & 12 V)	4 (RS-232)	2 (RS-232)	4 (RS-232)	4 (RS-232)	-
-	-	-	-	1	-	-	-
-	1	1	-	-	-	-	-
4	2	3	2	2	4	4	4
1	1	1	1	-	-	Cfast x 1	-
8-bit GPIO	16-bit GPIO	8-bit GPIO	16-bit GPIO	-	8-bit GPIO	8-bit GPIO	-
System reset	System reset	System reset	System reset	System reset	System reset	System reset	System reset
Programmable, 1 ~ 255 sec/min	Programmable, 1 ~ 255 sec/min	Programmable, 1 ~ 255 sec/min	Programmable, 1 ~ 255 sec/min	Programmable, 1~255 sec/min	Programmable, 1 ~ 255 sec/min	Programmable, 1 ~ 255 sec/min	Programmable, 1 ~ 255 sec/min
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# MicroATX Motherboards



## Selection Guide

Model Name		AIMB-562	AIMB-564	AIMB-566
Form Factor		MicroATX	MicroATX	MicroATX
Processor System	CPU	Intel Core 2 Duo/Pentium 4/Pentium Dual-Core/Celeron	Intel Core 2 Quad/Core 2 Duo/Pentium Dual-Core/Celeron	Intel Core 2 Quad/Core 2 Duo/Pentium Dual-Core/Celeron
	Socket	LGA775	LGA775	LGA775
	Max. Speed	2.8/3.4/2.2/2.0 GHz	2.66/2.8/2.2/3.2 GHz	2.66/3.16/2.6/2.0 GHz
	Front Side Bus	1066/800/533 MHz	1066/800/533 MHz	1333/1066/800 MHz
	L2 Cache	4 MB/2 MB/1 MB/512 KB	8 MB/3 MB/1 MB/512 KB	6 MB/6 MB/2 MB/512 KB
	Chipset	Intel 945GC + ICH7	Intel Q965 + ICH8 DO	Intel Q35 + ICH9 DO
	BIOS	Award 16 Mbit, SPI	AMI 16 Mbit, SPI	AMI 32 Mbit, SPI
Expansion Slot	PCI	2	2	1
	PCIe x16	-	1	-
	PCIe x4	-	1	1
	PCIe x1	1	-	-
Memory	Technology	Dual channel DDR2 533/667 MHz SDRAM	Dual channel DDR2 533/667/800 MHz SDRAM	Dual channel DDR2 667/800 MHz SDRAM
	Max. Capacity	4 GB	8 GB	8 GB
	Socket	2 x 240-pin DIMM	4 x 240-pin DIMM	4 x 240-pin DIMM
Graphics	Controller	Intel GMA 950	Intel GMA 3000	Intel GMA 3100
	VRAM	Shared system memory up to 224 MB	Shared system memory up to 256 MB	Shared system memory up to 384 MB
	LCD	Dual channel 48-bit LVDS	-	-
	DVI-D	-	-	1
	Dual Display	CRT+LVDS, CRT+CRT	-	CRT+DVI
Ethernet	Interface	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps
	Controller	Realtek RTL8111C	Intel 82566DM	Intel 82566DM
	Connector	RJ-45 x 1	RJ-45 x 1	RJ-45 x1
TPM		-	-	-
SATA	Max Data Transfer Rate	300 MB/s	300 MB/s	300 MB/s
	Channel	2	7 (SW RAID)	6 (SW RAID)
EIDE	Mode	ATA 100/66/33	ATA 100/66/33	ATA 100/66/33
	Channel	1	1	1
SSD	CompactFlash	-	-	-
I/O Interface	VGA	2	1	1
	USB	8	10	12
	Serial	10 (8 x RS-232; 2 x RS-232/422/485)	1 (RS-232)	2 (RS-232)
	Parallel	1	1	-
	FDD	-	1	1
	PS/2	2	2	2
	Ethernet (GbE)	1	1	1
	eSATA	-	1	-
	IEEE 1394	-	2 (1 x external & 1 x onboard)	-
	Audio	Mic-in, Line-out	Line-in, Line-out, Mic-in, CD-in, 6 jacks	Mic-in, Line-out
	GPIO	16-bit	-	-
Watchdog Timer	Output	System reset	System reset	System reset
	Interval	Programmable, 1 ~ 255 sec/min	Programmable, 1 ~ 255 sec/min	Programmable, 1 ~ 255 sec/min
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**NEW**

AIMB-567	AKMB-G41M	AIMB-580	AIMB-581
MicroATX	MicroATX	MicroATX	MicroATX
Intel Core 2 Quad/Core 2Duo/ Pentium Dual-Core/Celeron	Intel Core 2 Quad/Core 2Duo/ Pentium Dual-Core/Celeron	Intel Core i7/i5/i3/Pentium	Intel Core i7/i5/i3/Pentium
LGA775	LGA775	LGA1156	LGA1155
2.66/3.16/2.6/2.0 GHz	2.66/3.16/2.6/2.0 GHz	2.93 GHz/2.66 GHz/3.3 GHz/3.06 GHz/2.8 GHz	3.4 GHz/3.1 GHz/3.3 GHz
1333/1066/800 MHz	1333/1066/800 MHz	-	-
6 MB/6MB/6 MB/512 KB	6 MB/6 MB/2 MB/512 KB	8 MB/8 MB/4 MB/4 MB/3 MB	8 MB/6MB/3 MB
Intel G41 + ICH7R/ICH7	Intel G41 + ICH7	Intel Q57/3450	Intel Q67/B65/C206
AMI 16 Mbit, SPI	AMI 8 Mbit, SPI	AMI 64 Mbit, SPI	AMI 64 Mbit, SPI
2	2	2	2
1	1	1	1
1(G2)	0	1	1
1(VG)	1	-	-
Dual channel DDR3 800/1066 MHz SDRAM	Dual channel DDR3 800/1066 MHz SDRAM	Dual channel DDR3 800/1066/1333 MHz SDRAM	Dual channel DDR3 1066/1333 MHz SDRAM
4 GB	4 GB	16 GB	16 GB
4 x 240-pin DIMM	2 x 240-pin DIMM	4 x 240-pin DIMM	4 x 240-pin DIMM
Intel GMA X4500	Intel GMA X4500	Intel HD Graphics	Intel HD Graphics
Shared system memory up to 352 MB	Shared system memory up to 352 MB	1 GB maximum shared memory with 2 GB and above system memory installed	1 GB maximum shared memory with 2 GB and above system memory installed
-	-	-	Dual channel 48-bit LVDS
1	-	1	1
CRT+DVI	-	CRT+DVI	CRT+LVDS, CRT+DVI, LVDS+DVI
10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps
Intel 82583V Intel 82583V	Realtek RTL8111DL	Intel 82578DM Intel 82583V	Intel 82579LM Intel 82583V
RJ-45 x2	RJ-45 x 1	RJ-45 x2	RJ-45 x2
-	-	Optional	Optional
300 MB/s	300 MB/s	300 MB/s	300 MB/s 600 MB/s
4 (SW RAID)	4	6 (SW RAID)	4 (SW RAID) / 2
ATA 100/66/33	ATA 100/66/33	-	-
1	1	-	-
-	-	-	-
1	1	1	1
8	8	10	10 (USB 2.0) 2 (USB 3.0)
4 (3 x RS-232, 1 x RS-232/422/485)	6 (RS-232)	4 (3 x RS-232, 1 x RS-232/422/485)	4 (3 x RS-232, 1 x RS-232/422/485)
1	-	1	1
-	-	1	-
2	2	2	2
2	1	2	2
-	-	-	-
-	-	-	-
Mic-in, Line-out	Line-in, Line-out, Mic-in, CD-in, 6 jacks	Mic-in, Line-out	Mic-in, Line-out
8-bit	-	-	8-bit
System reset	System reset	System reset	System reset
Programmable 1 ~ 255 sec/min	Programmable, 1 ~ 255 sec/min	Programmable 1 ~ 255 sec/min	Programmable 1 ~ 255 sec/min
10-22	-	10-23	10-24

**1**  
Operator Panels

**2**  
Panel Computers

**3**  
Display Solutions

**4**  
Ethernet Switches

**5**  
Device Servers

**6**  
Serial Communication Cards

**7**  
Video Surveillance

**8**  
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**12**  
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**13**  
IPC Peripherals

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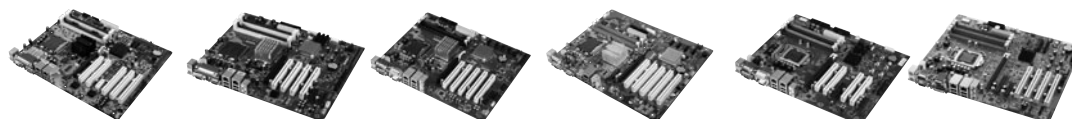
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PACs

# ATX Motherboards

NEW

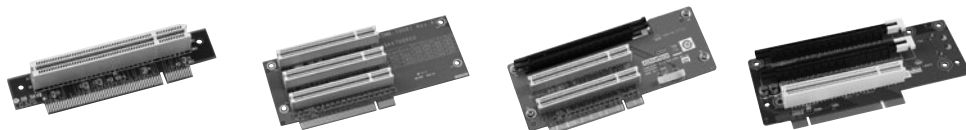
NEW

NEW



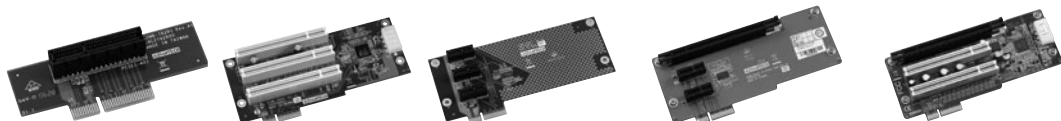
Model Name		AIMB-763	AIMB-766	AIMB-767	AIMB-769	AIMB-780	AIMB-781
Processor System	CPU	Intel Core 2 Duo/ Pentium 4/ Celeron D	Intel Core 2 Quad/ Core 2 Duo/Pentium dual-core/Celeron	Intel Core 2 Quad/ Core 2 Duo/Pentium dual-core/Celeron	Intel Core 2 Quad/ Core 2 Duo/Pentium dual-core/Celeron	Intel Core i7/i5/i3/ Pentium/Xeon	Intel Core i7/i5/i3
	Socket	LGA775	LGA775	LGA775	LGA 775	LGA 1156	LGA 1155
	Max. Speed	2.66 GHz/ 3.8 GHz/ 3.06 GHz	2.66 GHz/ 3 GHz/ 2.6 GHz/ 2.2 GHz	2.66 GHz/ 3 GHz/ 2.6 GHz/ 2.2 GHz	2.66 GHz/ 3 GHz/ 2.6 GHz/ 2.2 GHz	2.93 GHz/ 2.93 GHz/ 3.60 GHz/3.06 GHz/ 2.8 GHz	3.4 GHz/ 3.1 GHz/ 3.3 GHz
	Front Side Bus	1066/800/533 MHz	1333/1066/800 MHz	1333/1066/800 MHz	1333/1066/800 MH	-	-
	Cache	L2: 2 MB/ 2 MB/ 2 MB/ 512 KB	L2: 6 MB/ 6 MB/ 2 MB/ 512 KB	L2: 12 MB/ 6 MB/ 8 MB/ 512 KB	L2: 12 MB/ 6 MB/ 8 MB/ 512 KB	L3: 8 MB/ 4 MB/ 4 MB/ 3 MB/ 8 MB	L3: 8 MB/ 6 MB/ 3 MB
	Chipset	Intel 945G + ICH7R	Intel Q35 + ICH9 DO	Intel G41 + ICH7R	Intel G41 + ICH7	Q57 for QG2 version; 3450 for WG2 version	Q67/B65
	BIOS	Award 8 Mbit, FWH	AMI 32 Mbit, SPI	AMI 16 Mbit, SPI	AMI 16 Mbit, SPI	AMI 64 Mbit SPI	AMI 64 Mbit SPI
Expansion Slot	PCI	5	4	5	5	4	4
	PCIe x16	1	1	1	1	1 (Gen2)	1 (Gen2)
	PCIe x1	1	2	-	1	1	1 (Gen2)
	PCIe x4	-	-	1	-	1	1 (Gen2)
Memory	Technology	Dual channel DDR2 533/667 MHz	Dual Channel DDR2 667/ 800 MHz	Dual channel DDR3 800/1066 MHz	Dual channel DDR3 800/1066 MHz	Dual Channel DDR3 800/1066/1333 MHz	Dual Channel DDR3 1066/1333
	Max. Capacity	4 GB	8 GB	4 GB	4 GB	16 GB	16 GB
	Socket	4 x 240-pin DIMM	4 x 240-pin DIMM	2 x 240-pin DIMM	2 x 240-pin DIMM	4 x 240-pin DIMMI	4 x 240-pin DIMM
Graphics	Controller	Intel GMA 950	Intel GMA 3100	Intel GMA X4500	Intel GMA X4500	Intel HD Graphics	Intel HD Graphics
	VRAM	Shared system memory up to 224 MB	Shared system memory up to 384 MB	Shared system memory up to 352 MB	Shared system memory up to 352 MB	Shared system memory up to 1 GB	Shared system memory up to 1 GB
Ethernet	Interface	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps
	Controller	Dual Intel 82573L	GbE LAN1: 82566DM GbE LAN2: 82573L	Dual Intel 82583V	GbE LAN: Realtek RTL8111DL	GbE LAN1: Intel 82578DM, GbE LAN2: Intel 82583V	GbE LAN1: Intel 82579LM, GbE LAN2: Intel 82583V
SATA	Max. Data Transfer Rate	300 MB/s	300 MB/s	300 MB/s	300 MB/s	300 MB/s	600 MB/s; 300 MB/s
	Channel	4 (SW RAID)	6 (SW RAID)	4 (SW RAID)	4	6 (SW RAID)	6 (SW RAID)
EIDE	Mode	ATA 100/66/33	ATA 100/66/33	-	-	-	-
	Channel	1	1	-	-	-	-
I/O Interface	VGA	1	1	1	1	1	1
	DVI	-	-	1	-	1	1 for QG2 version
	USB	8	12	8	8	14	14 for QG2 version; 12 for QVG version
	Serial	4	4	4	2	4	6 for QG2 version
	Parallel	1	1	1	-	1	1
	FDD	1	1	1	1	1	-
	PS/2	2 (1 x keyboard and 1 x mouse)	2 (1 x keyboard and 1 x mouse)	2 (1 x keyboard and 1 x mouse)	2 (1 x keyboard and 1 x mouse)	2 (1 x keyboard and 1 x mouse)	2 (1 x keyboard and 1 x mouse)
	Ethernet (GbE)	2	2	2	1	2	2
	Audio	Mic-in, Line-in, Line-out	Mic-in, Line-out	Mic-in, Line-out	Mic-in, Line-out	Mic-in, Line-out	Mic-in, Line-out
Watchdog Timer	Output	System reset	System reset	System reset	System reset	System reset	System reset
	Interval	Programmable, 1 ~ 255 sec/min	Programmable, 1 ~ 255 sec/min	Programmable, 1 ~ 255 sec/min	Programmable, 1 ~ 255 sec/min	Programmable, 1 ~ 255 sec/min	Programmable, 1 ~ 255 sec/min
Page		10-25	10-26	10-27	10-28	10-29	10-30

# Riser Cards



## Selection Guide

Model Name		AIMB-RP10P-01A1E	AIMB-RP30P-03A1E	AIMB-RP3PF-21A1E	AIMB-RP3P8-12A1E
Interface		PCI	PCI	PCIe x16 / PCI	PCIe x16 / PCI
Expansion Slots		1 PCI	3 PCI	1 PCIe x16 + 2 PCI	2 PCIe x8 + 1 PCI
Chassis	1U	Yes	-	-	-
	2U	-	Yes	Yes	Yes
ATX	AIMB-780	Yes	Yes	Yes	Yes
	AIMB-767	Yes	Yes	Yes	-
	AIMB-766	Yes	Yes	Yes	-
	AIMB-763	-	-	Yes	-
MicroATX	AIMB-581	Yes	Yes	Yes	Yes
	AIMB-580	Yes	Yes	Yes	Yes
	AIMB-566	Yes	Yes	-	-
	AIMB-564	-	-	Yes	-
	AIMB-562	-	-	Yes	-



## Selection Guide

Model Name		AIMB-R4104-01A1E	AIMB-R430P-03A2E	AIMB-R4301-03A1E	AIMB-R431F-21A1E	AIMB-R43PF-21A1E
Interface		PCIe x4	PCIe x4	PCIe x4	PCIe x16 / PCIe x4	PCIe x16 / PCIe x4
Expansion Slots		1 PCIe x4	3 PCI	3 PCIe x1	1 PCIe x16 + 2 PCIe x1	1 PCIe x8 + 2 PCI
Chassis	1U	Yes	-	-	-	-
	2U	-	Yes	Yes	Yes	Yes
ATX	AIMB-781	Yes	Yes	Yes	-	-
	AIMB-769	Yes	Yes	△	-	-
	AIMB-764	Yes	Yes	Yes	Yes	Yes
	AIMB-762	Yes	Yes	△	△	Yes
Micro ATX	AIMB-562 KIOSK	-	Yes	-	-	-
	AIMB-556	Yes	Yes	Yes	Yes	Yes
	AIMB-554	Yes	Yes	△	△	Yes

Yes: Fully compatible

△: Only one PCIe x1 connector works (bottom slot).

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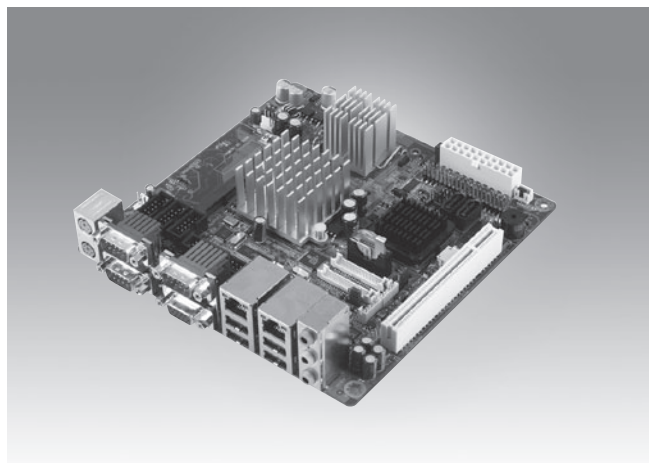
Embedded Controllers

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PACs

# AIMB-210

Intel® Atom™ Mini-ITX with VGA/LVDS,  
6 x COM, and Dual LAN



## Specifications

Processor System	CPU (45 nm)	Intel Atom N270
	Max. Speed	1.6 GHz
	Front Side Bus	533 MHz
	L2 Cache	512 KB
	Chipset	Intel 945GSE + ICH7M
	BIOS	Award 16 Mbit, SPI
Expansion Slot	PCI	32-bit/33 MHz, 1 slot
	Mini-PCI	-
	PCIe	-
Memory	Technology	Single channel DDR2 533 MHz SDRAM
	Max. Capacity	2 GB
	Socket	1 x 200-pin SODIMM
Graphics	Controller	Intel 945GSE GMCH integrated GMA 950
	VRAM	Shared system memory up to 224 MB SDRAM
	1st LVDS	Single channel 18-bit/Dual channel 36-bit LVDS
	2nd LVDS	Single channel 18/24-bit/Dual channel 36/48-bit LVDS, via Chromtek 7308B SDVO transmitter (F version)
	TV-Out	Supports both S-video and composite video (TV-Out function is not supported during POST stage)
	Dual Display	CRT + LVDS, CRT + TV-Out, LVDS + TV-Out
Ethernet	Interface	10/100/1000 Mbps
	Controller	GbE LAN1: Realtek 8111C; GbE LAN2: Realtek 8111C
	Connector	RJ-45 x 2
SATA	Max Data Transfer Rate	300MB/S
	Channel	2
EIDE	Mode	EIDE (Ultra DMA 100)
	Channel	1
Rear I/O	SSD	CompactFlash Supports CompactFlash Type I/II
	VGA	1
	Ethernet	2
	USB	4 (USB 2.0 compliant)
	Audio	3 (Mic-in, Line-out, Line-in)
	Serial	3 (2 x RS-232, 1 x RS-232/422/485)
	Parallel	-
	PS/2	2 (1 x keyboard and 1 x mouse)
Internal Connector	LVDS & Inverter	1
	USB	4 (USB 2.0 compliant)
	Serial	3 (RS-232)
	IDE	1
	SATA	2
	CompactFlash	1
	Parallel	1
	DIO	16-bit GPIO
Watchdog Timer	Output	System reset
	Interval	Programmable 1 ~ 255 sec/min
Power Requirements	Power On	1.6 GHz Atom processor, 2 GB DDR2 SDRAM +5 V@1.96 A; +3.3 V@1.21 A; +12 V@0.19 A; -12 V@0.06 A; +5 VSB@0.28 A
	Voltage@Current	

## Features

- Intel® Atom™ Mini-ITX motherboard supports N270 1.6 GHz processor
- One 200-pin SODIMM up to 2 GB DDR2 533 MHz SDRAM
- Supports dual display for VGA, LVDS, and TV-Out
- Built with 6 serial ports, 8 USB ports, CF, 2 LAN ports and TPM1.2 (optional)
- Supports embedded software APIs and utilities

### Software APIs:



### Utilities:



Environment	Temperature	Operating	Non-Operating
		0 ~ 60° C (32 ~ 140° F)	-20 ~ 70° C (-4 ~ 158° F)
Physical Characteristics	Dimensions	170 mm x 170 mm (6.69" x 6.69")	

\* Minimum order quantity is required.

## Ordering Information

Part Number	CPU	Chipset	GbE	COM	LVDS	TV-out	TPM
AIMB-210G2-S6A1E	Atom 1.6 GHz	945GSE	2	6	1, 18-bit	Yes	None
AIMB-210F-S6A1E	Atom 1.6 GHz	945GSE	2	6	2, 18/24-bit	Yes	Yes

## Packing List

Description	Quantity
AIMB-210 SBC	x 1
IDE HDD cable (40-pin)	x 1
SATA HDD cable	x 2
SATA power cable	x 2
Serial port cable	x 3
CPU cooler	x 1
I/O port bracket	x 1
Startup manual	x 1
Driver CD	x 1

## Optional Accessories

Part Number	Description
1700003195	USB cable with four ports, 17.5 cm
1700002204	USB cable with four ports, 27 cm
1700008461	USB cable with four ports, 30.5 cm
1700008809	Printer port cable, 25 cm, w/bracket

## Embedded OS/API

OS/API	Part No.	Description
Win XPE	2070009632	XPE WES2009 AIMB-210 V4.0 ENG
	2070007914	XPE WES2009 AIMB-210 V4.0 24MUI
Win CE	2070009651	CE 5.0 Pro AIMB-210 V1.4 ENG
	2070006271	CE 6.0 Pro AIMB-210 V1.1 ENG (Need ODM BIOS)
QNX	2070006272	IMG QNX V6.4 AIMB-210 V1.0 ENG (Audio is not supported)

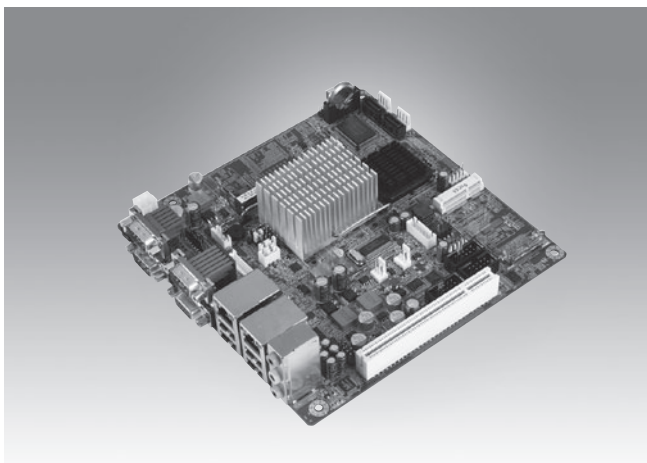
## Bracket View



AIMB-210G2-S6A1E  
AIMB-210F-S6A1E

# AIMB-212

Intel® Atom™ N450/D510 Mini-ITX with  
VGA/LVDS, 6 x COM, and Dual LAN



## Specifications

<b>Processor System</b>	CPU (45 nm)	Intel Atom N450	Intel Atom D510
	Max. Speed	1.66 GHz (single core)	1.66 GHz (dual core)
	L2 Cache	512 KB	1 MB
	Chipset	ICH8M	
<b>Expansion Slot</b>	BIOS	AMI 16 Mbit PSI	
	PCI	32-bit/33 MHz, 1 slot	
	Mini-PCIe	1	
<b>Memory</b>	PCle	-	
	Technology	Single channel DDR2 667 MHz not compatible with DDR2533 MHz	
	Max. Capacity	2 GB	
<b>Graphics</b>	Socket	1 x 200-pin SODIMM	
	Controller	Embedded Gen3.5+ GFX Core, 200/400-MHz render clock frequency for N450/D510	
	VRAM	Shared system memory up to 224 MB SDRAM	
	VGA	Supports up to SXGA 1400 x 1050 @ 60Hz for Atom N450, up to 2048 x 1536 for Atom D510	
	LVDS	Supports 18-bit single channel and up to WXGA 1366 x 768	
	TV-out	None	
<b>Ethernet</b>	Dual Display	CRT + LVDS, support extended mode and clone mode	
	Interface	10/100/1000 Mbps	
	Controller	GbE LAN1: Intel 82567V; GbE LAN2: Intel 82583V	
	Connector	RJ-45 x 2	
<b>SATA</b>	Max Data Transfer Rate	300 MB/s	
	Channel	2	
<b>EIDE</b>	Mode	None	
	Channel	None	
<b>SSD</b>	CompactFlash	Supports CompactFlash Type I/II	
	VGA	1	
<b>Rear I/O</b>	Ethernet	2	
	USB	4 (USB 2.0 compliant)	
	Audio	3 (Mic-in, Line-out, Line-in)	
	Serial	3 (2 of RS-232, 1 of RS-232/422/485)	
	Parallel	-	
	DC jack	1 (2.5 mm)	
<b>Internal Connector</b>	LVDS & Inverter	1	
	USB	4 (USB 2.0 compliant)	
	Serial	3 (RS-232)	
	IDE	None	
	SATA	2	
	SATA PWR connector	2	
	CompactFlash	1	
	Parallel	None	
	DIO	8-bit GPIO	
	Watchdog Timer	Output: System reset Interval: Programmable 1 ~ 255 sec/min	

## Features

- Supports Intel® Atom™ processor N450 and D510 dual core
- One 200-pin SODIMM up to 2 GB DDR2 667 MHz SDRAM
- Supports 1 PCI and 1 Mini-PCIe expansion, 6 serial ports, 8 USB, and CF
- Lower total cost of ownership with DC12V support
- Supports embedded software APIs and utilities

### Software APIs:



### Utilities



Note: eSOS requires ODM BIOS, available by request

<b>Power Requirements</b>	Typical	DC 12V Input (Tolerance ±10%)
<b>Environment</b>	Operating	Non-Operating
	Temperature	0 ~ 60° C (32 ~ 140° F) -40 ~ 85° C (-40 ~ 185° F)
<b>Physical Characteristics</b>	Dimensions	170 mm x 170 mm (6.69" x 6.69")

## Ordering Information

Part Number	CPU	SC/DC	GbE	COM	LVDS
AIMB-212N-S6A1E	Atom N450	Single core	2	6	1, 18-bit
AIMB-212D-S6A1E	Atom D510	Dual core	2	6	1, 18-bit

## Packing List

Part number	Description	Quantity
1700003194	SATA HDD cable	x 2
1700017461	SATA power cable	x 2
1700001788	Serial port cable	x 3
1960046526N001	CPU cooler (For Atom D510 only)	x 1
1960046435T000	I/O port bracket	x 1
2002021210	Startup manual	x 1
2062021200	Driver CD	x 1

## Optional Accessories

Part Number	Description
1700003195	USB cable with four ports, 17.5 cm
1700002204	USB cable with four ports, 27 cm
1700008461	USB cable with four ports, 30.5 cm
1757003082	Adapter AC100-240V 60W +12V/5A

## Embedded OS/API

OS/API	Part No.	Description
Win XPE	2070009030	XPE WES2009 AIMB-210 V4.0 ENG
	2070009031	XPE WES2009 AIMB-210 V4.0 24MUI
Software API	205E212000	SUSI 3.0 SW API for AIMB-212 B:20091115 XP

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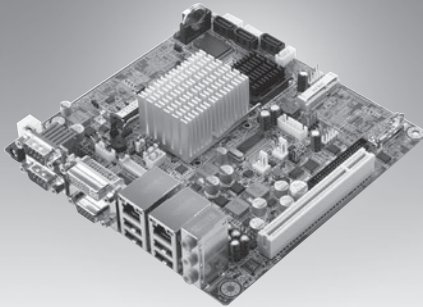
18  
PACs



# AIMB-213

Intel® Atom™ N455/D525 Mini-ITX with  
VGA/DVI/LVDS, 6 x COM, and Dual LAN

NEW



## Specifications

Processor System	CPU (45 nm)	Intel Atom N455	Intel Atom D525
	Max. Speed	1.66 GHz (single core)	1.8 GHz (dual core)
	L2 Cache	512 KB	1 MB
	Chipset	ICH8M	
	BIOS	AMI 16 Mbit SPI	
Expansion Slot	PCI	32-bit/33 MHz, 1 slot	
	Mini-PCIe	1	
	PCIe	-	
Memory	Technology	Single channel DDR3 800 MHz SDRAM	
	Max. Capacity	2 GB/4 GB	
	Socket	2 x 204 pin SODIMM	
Graphics	Controller	Embedded Gen3.5+ GFX Core, 200/400-MHz render clock frequency for N455/D525	
	VRAM	Shared system memory up to 224 MB SDRAM	
	VGA	Supports up to SXGA 1400 x 1050 @ 60Hz for Atom N455, up to 2048 x 1536 for Atom D525	
	LVDS	Supports 18/24-bit single channel and up to WXGA 1366 x 768 (Chrontel 7036)	
	DVI	Supports up to UXGA 1600 x 1200 @ 60Hz	
	Dual Display	VGA + DVI, VGA + LVDS, support extended mode and clone mode	
Ethernet	Interface	10/100/1000 Mbps	
	Controller	GbE LAN1: Intel 82567V; GbE LAN2: Intel 82583V	
	Connector	RJ-45 x 2	
SATA	Max Data Transfer Rate	300 MB/s	
	Channel	3	
EIDE	Mode	None	
	Channel	None	
SSD	CompactFlash	Supports CompactFlash Type I/II	
	VGA	1	
Rear I/O	DVI	1	
	Ethernet	2	
	USB	4 (USB 2.0 compliant)	
	Audio	3 (Mic-in, Line-out, Line-in)	
	Serial	2 (1 of RS-232, 1 of RS-232/422/485)	
	Parallel	-	
	DC jack	1 (2.5 mm)	
Internal Connector	LVDS & Inverter	1	
	USB	4 (USB 2.0 compliant)	
	Serial	4 (RS-232), only COM6 supply 5V/12V	
	IDE	None	
	SATA	3	
	SATA PWR connector	3	
	CompactFlash	1	
	Parallel	None	
	DIO	8-bit GPIO	

## Features

- Supports Intel® Atom™ processor N455 and D525 dual core
- Two 204-pin SODIMM up to 2 GB/4 GB DDR3 800 MHz SDRAM
- Supports 1 PCI and 1 Mini-PCIe expansion, 6 serial ports, 8 USB, and CF
- Lower total cost of ownership with DC12V support and support 18/24-bit LVDS
- Onboard TPM 1.2 support (optional)
- Supports embedded software APIs and utilities

Software APIs:					
	SMBus	H/W Monitor	Brightness	Watchdog	GPIO
Utilities					
	BIOS flash	eSOS	Monitoring	Flash Lock	Embedded Security ID

Note: eSOS requires ODM BIOS, available by request

Watchdog Timer	Output	System reset	
	Interval	Programmable 1 ~ 255 sec/min	
Power Requirements	Typical	DC 12V Input (Tolerance ±10%)	
		Operating	Non-Operating
Environment	Temperature	0 ~ 60° C (32 ~ 140° F)	-40 ~ 85° C (-40 ~ 185° F)
	Dimensions	170 mm x 170 mm (6.69" x 6.69")	

## Ordering Information

Part Number	CPU	SC/DC	GbE	COM	LVDS
AIMB-213N-S6A1E	Atom N455	Single core	2	6	1, 18/24-bit
AIMB-213D-S6A1E	Atom D525	Dual core	2	6	1, 18/24-bit

## Packing List

Part number	Description	Quantity
1700003194	SATA HDD cable	x 3
1700018785	SATA power cable	x 3
1700008876	Serial port cable 1 to 4	x 1
1960046526N001	CPU cooler (For Atom D525 only)	x 1
1960050473T000	I/O port bracket	x 1
2002021310	Startup manual	x 1
2062021300	Driver CD	x 1

## Optional Accessories

Part Number	Description
1700003195	USB cable with four ports, 17.5 cm
1700002204	USB cable with four ports, 27 cm
1700008461	USB cable with four ports, 30.5 cm
1757003082	Adapter AC100-240V 60 W +12V/5A FSP
1757003062	Adapter AC100-240V 60W +12V/5A(Delta)
1700018699	KBMS cable 1*6P-2.5/DIN-6P(F)*2, 25 cm

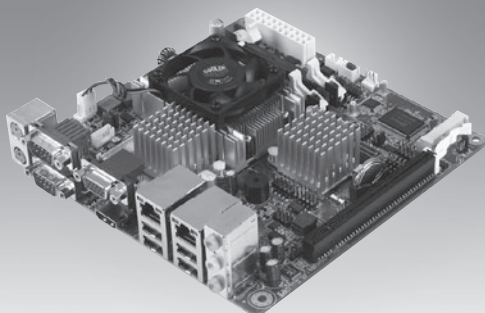
## Bracket View



# AIMB-222

## AMD Mobile Athlon™ II Neo/Turion™ II Neo ASB2 BGA Neo Mini ITX with VGA/LVDS/HDMI/DVI, 4 x COM and Dual LAN

**NEW**



### Specifications

<b>Processor System</b>	CPU	AMD Turion II Neo	AMD Turion II Neo	AMD Athlon II Neo
	Max. Speed	2.2 GHz (dual-core 25W TDP)	1.5 GHz (Dual-Core 15W TDP)	1.7 GHz (Single-Core 12W TDP)
	L2 Cache	2 MB		
	Chipset	AMD 785E + SB820		
	BIOS	AMI 16 Mbit SPI		
<b>Expansion Slot</b>	PCI	-		
	Mini-PCIe	1		
	PCIe	PCIe x8 (PCIe gen 2)		
<b>Memory</b>	Technology	Dual channels DDR3 1066 MHz SDRAM		
	Max. Capacity	4 GB		
	Socket	2 x 204-pin SODIMM		
<b>Graphics</b>	Controller	ATI Radeon™ HD4200 serial, supports OpenGL 2.0, DirectX10, H.264, VC1		
	VGA	Supports up to 2560 x 1536 @ 32bpp		
	LVDS	Supports 24-bit dual channel and up to 1920 x 1200		
	DVI (optional)	1920 x 1200 @ 60 MHz		
	HDMI	1920 x 1200 @ 60 MHz		
	Dual Display	Supports dual display of any two display device (CRT, LVDS, HDMI, DVI)		
<b>Ethernet</b>	Interface	10/100/1000 Mbps		
	Controller	GbE LAN1: RTL8111DL; GbE LAN2: RTL8111DL		
	Connector	RJ-45 x 2		
<b>SATA</b>	Max Data Transfer Rate	300 MB/s		
	Channel	2		
<b>EIDE</b>	Mode	None		
	Channel	None		
<b>SSD</b>	Cfast compactFlash	Cfast type I/II		
<b>Rear I/O</b>	VGA	1		
	DVI	1		
	Ethernet	2		
	USB	4		
	Audio	3 (Mic-in, Line-out, Line-in)		
	Serial	2 (RS-232)		
<b>Internal Connector</b>	LVDS & Inverter	1		
	DVI	1 (optional)		
	USB	4 (USB 2.0 compliant)		

### Features

- Supports AMD Mobile Athlon™ II Neo/AMD Turion™ II Neo ASB2 BGA processors
- Two 204-pin SODIMM up to 4 GB DDR3 1066 MHz SDRAM
- Supports VGA/LVDS/HDMI, DVI is optional
- Dual LANs, 4COM, Mini PCIe, and CFast
- Supports embedded software APIs and utilities

#### Software APIs:



#### Utilities:



Note: eSOS requires ODM BIOS, available by request

<b>Internal Connector</b>	Serial	2 (RS-232, 5V/12V by jumper selection)	
	IDE	None	
	SATA	2	
	Cfast CompactFlash	1	
	Parallel	None	
	GPIO	8-bit	
<b>Watchdog Timer</b>	Output	System reset	
	Interval	Programmable 1 ~ 255 sec/min	
<b>Environment</b>	Temperature	Operating	Non-Operating
		0 ~ 60° C (32 ~ 140° F)	-40 ~ 85° C (-40 ~ 185° F)
<b>Physical Characteristics</b>	Dimensions	170 mm x 170 mm (6.69" x 6.69")	

### Ordering Information

Part Number	CPU	Display	LAN	COM
AIMB-222G2-S0A1E	1.7 GHz	CRT/LVDS/HDMI	2	4
AIMB-222G2-S1A1E	1.5 GHz	CRT/LVDS/HDMI	2	4
AIMB-222G2-S2A1E	2.2 GHz	CRT/LVDS/HDMI/DVI	2	4

### Packing List

Description	Quantity
AIMB-222 SBC	x 1
SATA HDD cable	x 2
Serial port cable	x 2
CPU cooler	x 1
I/O port bracket	x 1
Startup manual	x 1
Driver CD	x 1

### Bracket View

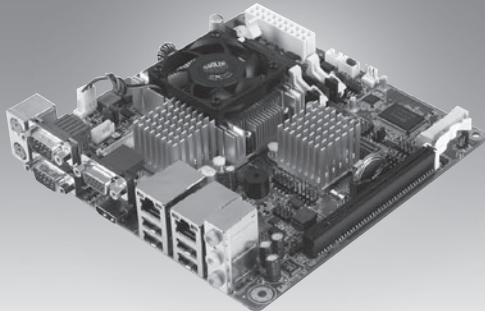


- Operator Panels
- Panel Computers
- Display Solutions
- Ethernet Switches
- Device Servers
- Serial Communication Cards
- Video Surveillance
- IPC Chassis
- SBCs and Backplanes
- Industrial Motherboards
- Embedded IPCs
- Server-grade IPCs
- IPC Peripherals
- DAQ Boards
- Signal Conditioning
- USB DAQ Modules
- Embedded Controllers
- PACs

# AIMB-223

## AMD Mobile G-series Dual Core/Single Core Mini-ITX with VGA/LVDS/HDMI, 6 x COM and Dual LAN

**NEW**



### Specifications

<b>Processor System</b>	CPU	AMD Dual Core T56N	AMD Dual Core T40
	Max. Speed	1.6 GHz (dual core 18W TDP)	1.0 GHz (dual core 5 W TDP)
	L2 Cache	512 KB	
	Chipset	AMD eONTARIO + A55E	
	BIOS	AMI 16 Mbit SPI	
<b>Expansion Slot</b>	PCI	1	
	Mini-PCIe	1	
	PCIe	PCIe x1 (PCIe gen2)	
<b>Memory</b>	Technology	One channels DDR3 1333 MHz	
	Max. Capacity	2 GB	
	Socket	1 x 204 pin SODIMM	
<b>Graphics</b>	Controller	ATI Radeon RV7x0, support DX11, UVD3	
	VGA	Supports up to 2560 x 1536 @ 32bpp	
	LVDS	Supports 24-bit dual channel and up to 1920 x 1200	
	HDMI	1920 x 1200 @ 60 MHz	
	Dual Display	Supports dual display of any two display device (CRT, LVDS, HDMI)	
<b>Ethernet</b>	Interface	10/100/1000 Mbps	
	Controller	GbE LAN1: RTL8111DL; GbE LAN2: RTL8111DL	
	Connector	RJ-45 x 2	
<b>SATA</b>	Max Data Transfer Rate	6 GB/s	
	Channel	4	
<b>EIDE</b>	Mode	None	
	Channel	None	
<b>SSD</b>	Cfast compactFlash	Cfast type I/II	
<b>Rear I/O</b>	VGA	1	
	HDMI	1	
	Ethernet	2	
	USB	4 (USB 2.0 compliant)	
	Audio	3 (Mic-in, Line-out, Line-in)	
	Serial	2 (RS-232)	
	DCjack	1 (2.5 mm)	
<b>Internal Connector</b>	LVDS & Inverter	1	
	USB	4 (USB 2.0 compliant)	
	Serial	4 (RS-232, 5V/12V by jumper selection)	
	IDE	None	
	SATA	4	

### Features

- Supports AMD Mobile G-series Dual Core/Single Core processor
- One 204-pin SODIMM up to 2 GB DDR3 1333 MHz SDRAM
- Supports VGA/LVDS/HDMI
- Dual LANs, 6COM, Mini PCIe, and Cfast
- Supports embedded software APIs and utilities

<b>Software APIs:</b>					
	SMBus	H/W Monitor	Watchdog	GPIO	Brightness
<b>Utilities:</b>					
	BIOS flash	eSOS	Monitoring	Embedded Security ID	Flash Lock

Note: eSOS requires ODM BIOS, available by request

<b>Internal Connector</b>	Cfast CompactFlash	1
	Parallel	None
	GPIO	8-bit
<b>Watchdog Timer</b>	Output	System reset
	Interval	Programmable 1 ~ 255 sec/min
<b>Environment</b>	Temperature	Operating: 0 ~ 60° C (32 ~ 140° F)
		Non-Operating: -40 ~ 85° C (-40 ~ 185° F)
<b>Physical Characteristics</b>	Dimensions	170 mm x 170 mm (6.69" x 6.69")

### Ordering Information

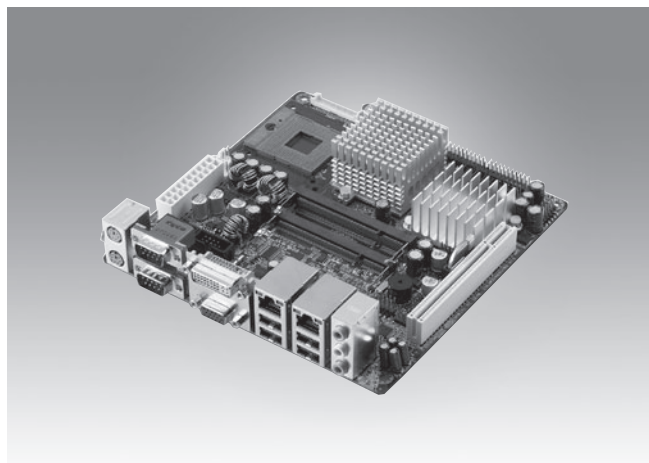
Part Number	CPU	Display	LAN	COM
AIMB-223G2-S0A1E	1.0 GHz	CRT/LVDS/HDMI	2	6
AIMB-223G2-S1A1E	1.6 GH	CRT/LVDS/HDMI	2	6

### Packing List

Part Number	Quantity
AIMB-223 SBC	x 1
SATA HDD cable	x 2
Serial port cable	x 2
CPU cooler	x 1
I/O port bracket	x 1
Startup manual	x 1
Driver CD	x 1

# AIMB-256

Intel® Core™2 Duo Mini-ITX with  
VGA/DVI/LVDS, 4 x COM and Dual LAN



## Specifications

<b>Processor System</b>	CPU (65 nm µFC-PGA 478, Socket P)	Intel Core 2 Duo	Intel Celeron M	Intel ULV Core 2 Duo
	Max. Speed	T7500 2.2 GHz	550 2.0 GHz	U7500 1.06 GHz on board
	Front Side Bus	800 MHz	533 MHz	533 MHz
	L2 Cache	2 x 2 MB	1 MB	1 MB
	Chipset	Intel GME965 + ICH8M		
	BIOS	AMI 16 Mbit, SPI		
<b>Expansion Slot</b>	PCI	32-bit/33 MHz, 1 slot		
	Mini-PCI	-		
	PCIe	-		
<b>Memory</b>	Technology	Dual channel DDR2 533/667 MHz SDRAM		
	Max. Capacity	4 GB		
	Socket	2 x 200-pin SODIMM		
<b>Graphics</b>	Controller	Intel GME965 GMCH integrated Graphics Media Accelerator X3100		
	VRAM	DVMT 4.0 supports shared system memory up to 384 MB video memory		
	LVDS	Single channel 18/24-bit/Dual channel 36/48-bit LVDS		
	TV-Out	-		
	DVI	Yes, via Chrontel CH7307C SDVO transmitter		
	Dual Display	CRT+LVDS, CRT+DVI, LVDS+DVI		
<b>Ethernet</b>	Interface	10/100/1000 Mbps		
	Controller	GbE LAN1: Realtek RTL8111B; GbE LAN2: Realtek RTL8111B		
	Connector	RJ-45 x 2		
<b>SATA</b>	Max Data Transfer Rate	300 MB/s		
	Channel	3		
<b>EIDE</b>	Mode	EIDE (Ultra DMA 100)		
<b>SSD</b>	Channel	1		
	CompactFlash	Supports CompactFlash Type I/II		
<b>Rear I/O</b>	VGA	1		
	DVI	1		
	Ethernet	2		
	USB	4 (USB 2.0 compliant)		
	Audio	3 (Mic-in, Line-out, Line-in)		
	Serial	2 (2 x RS-232, supplies 5 V & 12 V)		
	PS/2	2 (1 x keyboard and 1 x mouse)		
	LVDS	1		
<b>Internal Connector</b>	USB	6 (USB 2.0 compliant)		
	Serial	2 (2 x RS-232, supplies 5 V & 12 V)		
	IDE	1		
	SATA	3		
	CompactFlash	1		
	Parallel	-		
	IrDA	-		

## Features

- Supports Intel® Core™2 Duo/ Celeron® M mobile processor uFC-PGA 478 - GME965 and ICH8M
- Two 200-pin SODIMM sockets support up to 4 GB dual channel DDR2 533/667 MHz SDRAM
- Supports dual display for VGA, LVDS, and DVI
- Supports 4 serial ports, 3 SATA ports, 2 LAN, CF and TPM1.2 (optional)
- Supports embedded software APIs and utilities

### Software APIs:



### Utilities:



<b>Internal Connector</b>	FDD	-
	GPIO	8-bit
<b>Watchdog Timer</b>	Output	System reset
	Interval	Programmable 1 ~ 255 sec/min
<b>Power Requirements</b>	Power On	Core 2 Duo T7300 2.0 GHz FSB 800 MHz, 2 GB DDR2 SDRAM
	Voltage@Current	+5 V@2.75 A; +3.3 V@1.76 A; +12 V@4.13 A; +5 VSB@1.42 A
<b>Environment</b>	Operating	Non-Operating
	Temperature	0 ~ 60° C (32 ~ 140° F) -20 ~ 70° C (-4 ~ 158° F)
<b>Physical Characteristics</b>	Dimensions	170 mm x 170 mm (6.69" x 6.69")

## Ordering Information

Part Number	CPU	GBE	DVI	SATA
AIMB-256G2-00A1E	-	2	1	3
AIMB-256G2-S1A1E	C2D 1.06 GHz	2	1	3

## Packing List

Description	Quantity
AIMB-256 SBC	x 1
IDE HDD cable (40-pin)	x 1
SATA HDD data cable	x 2
SATA HDD power cable	x 2
Serial cables	x 2
CPU cooler	x 1
I/O port bracket	x 1
Startup manual	x 1
Driver CD	x 1

## Optional Accessories

Part Number	Description
1700003195	USB cable with two ports, 17.5 cm
1700002204	USB cable with two ports, 27 cm
1700008461	USB cable with four ports, 30.5 cm

## Embedded OS/API

OS/API	Part No.	Description
Win XPE	2070004369	XPE SP2 FP2007AIMB-256 V3.01 ENG
Software API	205E000021	SUSI 3.0 SW API for AIMB-256 XP

## Bracket View

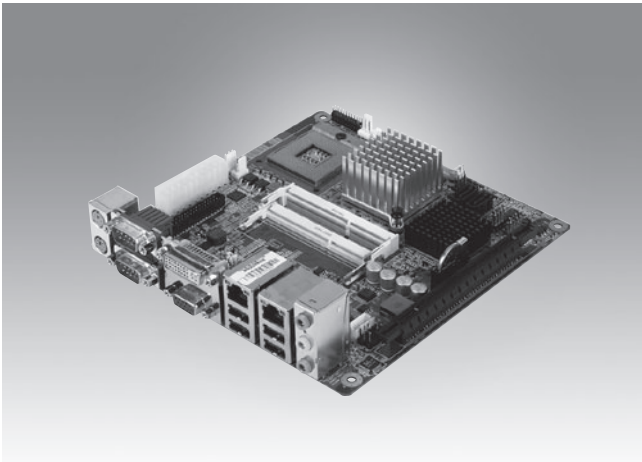


AIMB-256G2-00A1E  
AIMB-256G2-S1A1E

- Operator Panels
- Panel Computers
- Display Solutions
- Ethernet Switches
- Device Servers
- Serial Communication Cards
- Video Surveillance
- IPC Chassis
- SBCs and Backplanes
- Industrial Motherboards
- Embedded IPCs
- Server-grade IPCs
- IPC Peripherals
- DAQ Boards
- Signal Conditioning
- USB DAQ Modules
- Embedded Controllers
- PACs

# AIMB-258

Intel® Core™2 Duo Mini-ITX with  
VGA/DVI/LVDS, 6 x COM, and Dual LAN



## Specifications

Processor System	CPU (45 nm μFC-PGA 478)	Intel Core 2 Duo	Intel Celeron M
	Max. Speed	T9400 2.53 GHz	575 2.0 GHz
	Front Side Bus	667/800/1066 MHz	667
	L2 Cache	6 MB	1 MB
	Chipset	GM45 + ICH9M	
	BIOS	Award 16 Mbit, SPI	
	PCI	-	
Expansion Slot	Mini-PCI	-	
	PCIe x16	4 GB/s per direction, 1 slot (if PCIe x16 is used, DVI is automatically disabled)	
Memory	Technology	DDR3 800/1066 MHz SDRAM	
	Max. Capacity	4 GB	
	Socket	2 x 204-pin SODIMM	
Graphics	Controller	Intel GM45 GMCH integrated Graphics Media Accelerator X4500	
	VRAM	Shared system memory up to 384 MB video memory	
	LVDS	Single channel 18/24-bit/Dual channel 36/48-bit LVDS	
	TV-Out	-	
	DVI	Yes (if DVI is used, PClex 16 is automatically disabled)	
	Dual Display	CRT + DVI; CRT + LVDS; DVI + LVDS	
Ethernet	Interface	10/100/1000 Mbps	
	Controller	GbE LAN1: Realtek RTL8111C; GbE LAN2: Realtek RTL8111C	
	Connector	RJ-45 x 2	
SATA	Max Data Transfer Rate	300 MB/s	
SSD	Channel	2	
	CompactFlash	Supports CompactFlash Type I/II	
Rear I/O	VGA	1	
	DVI	1	
	Ethernet	2	
	USB	4 (USB 2.0 compliant)	
	Audio	3 (Mic-in, Line-in, Line-out)	
	Serial	2 (1 of RS-232, 1 of RS-232/422/485)	
	PS/2	2 (1 x keyboard and 1 x mouse)	
Internal Connector	LVDS	1	
	USB	4 (USB 2.0 compliant)	
	Serial	4 (RS-232)	
	IDE	-	
	SATA	2	
	CompactFlash	1	
	Parallel	-	
	IrDA	-	
	FDD	-	
	GPIO	16-bit	

## Features

- Supports Intel® Core™2 Duo mobile processor uFC-PGA 478 dual channel DDR3 800/1066 MHz SDRAM and max. 4 GB dual channel DDR3 800/1066 MHz SDRAM
- Intel GM45 and ICH9M supports FSB 667/800/1066 MHz
- Supports dual display for VGA, LVDS, and DVI
- PCIe x16 expansion for add-on cards
- Supports embedded software APIs and utilities

### Software APIs:



### Utilities:



Watchdog Timer	Output	System reset
	Interval	Programmable 1 ~ 255 sec/min
Power Requirements	Voltage@Current	+5 V@0.99 A; +3.3 V@2.67 A; +12 V@2.07 A; -12 V@0.08A; +5 VSB@0.17 A
		Operating Non-Operating
Environment	Temperature	0 ~ 60° C (32 ~ 140° F) -20 ~ 70° C (-4 ~ 158° F)
Physical Characteristics	Dimensions	170 mm x 170 mm (6.69" x 6.69")

## Ordering Information

	Display	GbE	SATA	Serial	CF
AIMB-258G2-00A1E	VGA/DVI/ LVDS	Dual	2	6	1

## Packing List

Part number	Description	Quantity
1700003194	SATA HDD cable	x 2
1700017461	SATA power cable	x 2
1750000348	CPU cooler	x 1
1960019193T100	I/O port bracket	x 1
2006025810	Startup manual	x 1
2066025800	Driver CD	x 1
1701400181	Cable kits for 4 serial ports	x 1

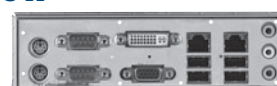
## Optional Accessories

Part Number	Description
1700003195	USB cable with four ports, 17.5 cm
1700002204	USB cable with four ports, 27 cm
1700008461	USB cable with four ports, 30.5 cm

## Embedded OS/API

OS/API	Part No.	Description
Win XPE	20700009518	Image WES2009 AIMB-258 V4.0 ENG
	20700009657	XPE WES2009 AIMB-258 V4.0 CHT
	20700009658	XPE WES2009 AIMB-258 V4.0 MUI24
Software API	205E000021	SUSI 3.0 SW API for AIMB-258 XP

## Bracket View

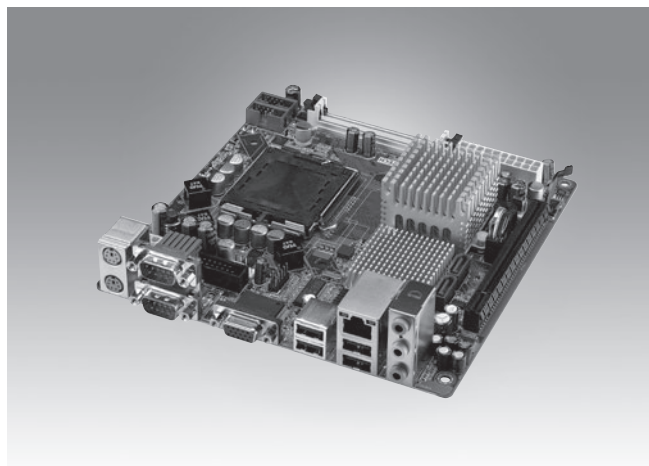


AIMB-258G2-00A1E



# AIMB-262

## LGA775 Intel® Core™2 Duo Mini-ITX with VGA, 4 x COM, and LAN



### Specifications

Processor System	CPU	Intel Core 2 Duo	Intel Pentium Dual-Core	Intel Pentium 4	Intel Celeron
	Max. Speed	E7400/E6700, 2.8/2.66 GHz	E2200 2.2GHz	651 3.4 GHz	440 2.0 GHz
	Front Side Bus	1066 MHz	1066/800 MHz	800 MHz	800 MHz
	L2 Cache	3 MB/2 MB	1 MB	2 MB	512 K
	Chipset	Intel 945GC + ICH7			
Expansion Slot	BIOS	Award 16 Mbit, SPI			
	PCI	-			
	Mini-PCI	-			
Memory	PCIe x16	4 GB/s per direction, 1 slot			
	Technology	Dual channel DDR2 533/ 667 MHz SDRAM			
	Max. Capacity	2 GB			
Graphics	Socket	2 x 200-pin SODIMM			
	Controller	Intel Integrated Graphics Media Accelerator 950			
Ethernet	VRAM	Shared system memory up to 224 MB			
	Interface	10/100/1000 Mbps			
	Controller	GbE LAN1: Realtek RTL8111C			
SATA	Connector	RJ-45 x 1			
	Max Data Transfer Rate	300 MB/s			
	Channel	2			
Rear I/O	VGA	1			
	Ethernet	1			
	USB	4 (USB 2.0 compliant)			
	Audio	3 (Mic-in, Line-out, Line-in)			
	Serial	2 (1 x RS-232, 1 x RS-232/422/485)			
	Parallel	-			
	PS/2	2 (1 x keyboard and 1 x mouse)			
Internal Connector	USB	2 (USB 2.0 compliant)			
	Serial	2 (RS-232)			
	IDE	-			
	SATA	2			
	CompactFlash	-			
	Parallel	1			
	IrDA	-			
	GPIO	-			
Watchdog Timer	Output	System reset			
	Interval	Programmable 1 ~ 255 sec/min			
Power Requirements	Voltage@ Current	+5 V@4 A; +3.3 V@1.02 A; +12 V@2.35 A; -12 V@0.12A; +5 VSB@0.26 A			

### Features

- Supports Intel® LGA775 Core 2™ Duo/Pentium® Dual-Core/Pentium® 4/ Celeron® processors with FSB 533/800/1066 MHz
- Intel 945GC and ICH7
- Two SODIMM sockets support up to 2 GB DDR2 533/667 MHz SDRAM
- Supports onboard VGA and PCIe x16 expansion for additional graphics card
- Supports embedded software APIs and utilities

#### Software APIs:



H/W Monitor



Watchdog

#### Utilities:



BIOS flash



Monitoring

Environment	Temperature	Operating	Non-Operating
		0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution	-20 ~ 70° C (-4 ~ 158° F)
Physical Characteristics	Dimensions	170 mm x 170 mm (6.69" x 6.69")	

### Ordering Information

Part Number	VGA	GbE LAN	COM
AIMB-262VG-00A1E	Yes	1	4

### Packing List

Description	Quantity
SATA HDD cable	x 2
SATA Power cable	x 2
Serial cable	x 2
I/O port bracket	x 1
Startup manual	x 1
Driver CD	x 1

### Optional Accessories

Part Number	Description
1700008809	Parallel port cable with bracket
1700002204	Dual port USB cable (27 cm) with bracket
1960022033T000	LGA775 CPU cooler for 2U and wallmount chassis
AIMB-LVDS-00A1E	ADD2 LVDS expansion card
AIMB-VGA-00A1E	ADD2 VGA expansion card

### Embedded OS/API

OS/API	Part No.	Description
Win XPE	2070005409	XPE FP2007 AIMB-262 V3.01 ENG
	2070005410	XPE FP2007 AIMB-262 V3.01 CHT

### Bracket View

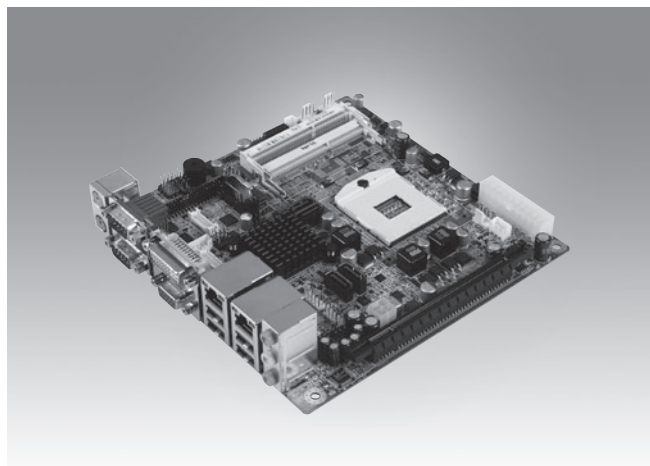


AIMB-262VG-00A1E

- Operator Panels
- Panel Computers
- Display Solutions
- Ethernet Switches
- Device Servers
- Serial Communication Cards
- Video Surveillance
- IPC Chassis
- SBCs and Backplanes
- Industrial Motherboards
- Embedded IPCs
- Server-grade IPCs
- IPC Peripherals
- DAQ Boards
- Signal Conditioning
- USB DAQ Modules
- Embedded Controllers
- PACs

# AIMB-270

Intel® Core™ i7/i5/Celeron Mini-ITX with  
VGA/2DVI/LVDS, 6 x COM, Dual LAN, PCIe x16



## Specifications

Processor System	CPU	Intel Core i7	Core i5	Intel Celeron
	Max. Speed	2.66 GHz	2.4 GHz	1.86 GHz
	DMI/FDI	DMI/FDI		
	L2 Cache	4 MB	3 MB	2 MB
	Chipset	Intel 5 series Chipset (QM57)		
Expansion Slot	BIOS	AMI EFI 64 Mbit SPI		
	PCI	-		
	Mini-PCIe	1		
Memory	PCIe x16 (Gen2)	8 GB/s per direction, 1 slot		
	Technology	DDR3 800/1066 MHz SDRAM		
	Max. Capacity	8 GB		
Graphics	Socket	2x 204 PIN DDR3 Socket		
	Controller	Integrated Gfx Gen5.75, supports DirectX 10 and OpenGL 2.1		
	VRAM	Shared system memory, 2 GB and above, total system memory shared 1 GB maximum video memory		
	VGA	Yes, supports max. resolution 2048 x 1536		
	LVDS	Single channel 18/24-bit/Dual channel 36/48-bit LVDS, supports max resolution 1920 x 1200		
	1st DVI	Yes, supports max. resolution 1920 x 1200		
	2nd DVI	Yes, with internal pin header, supports max. resolution 1920 x 1200		
Ethernet	Dual Display	CRT+LVDS, CRT+DVI, LVDS+DVI		
	Interface	10/100/1000 Mbps		
	Controller	GbE LAN1: Intel 82577LM, LAN2: Intel 82583V		
SATA	Connector	RJ-45 x 2		
	Max Data Transfer Rate	300 MB/s		
Rear I/O	Channel	4		
	VGA	1		
	DVI	1		
	Ethernet	2		
	USB	4 (USB 2.0 compliant)		
	Audio	3 (Mic-in, Line-out, Line-in)		
	Serial	2 (RS-232)		
Internal Connector	PS/2	2 (1 x keyboard and 1 x mouse)		
	USB	4 (USB 2.0 compliant)		
	LVDS/ inverter	1		
	2nd DVI	1		
	Serial	4 (RS-232)		
	IDE	-		
	SATA	4		
	Mini-PCIe	1		
	Parallel	-		
	IrDA	-		
	GPIO	8-bit		

## Features

- Supports Intel® Core™ i7 and i5 mobile processor (PGA) with Intel QM57 chipset
- Supports dual display of 2 DVI, LVDS, and VGA
- Supports PCIe x16 (Gen 2) and mini PCIe
- Supports, AMT6.0 and software RAID 0, 1, 5, 10
- Supports embedded software APIs and Utilities

Software APIs:					
	SMBus	H/W Monitor	Watchdog	GPIO	Brightness
Utilities:					
	BIOS flash	eSOS	Monitoring	Embedded Security ID	Flash Lock

Note: eSOS requires ODM BIOS, available by request

Watchdog Timer	Output Interval	System reset
		Programmable 1 ~ 255 sec/min
Power Requirements	Voltage@Current	+5 V@3.42 A; +3.3 V@1.1 A; +12 V@1.19 A; -12 V@0.07 A; +5 VSB@0.5 A
		Operating Non-Operating
Environment	Temperature	0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution
		-20 ~ 70° C (-4 ~ 158° F)
Physical Characteristics	Dimensions	170 mm x 170 mm (6.69" x 6.69")

## Ordering Information

Part Number	VGA	2 DVI	GbE LAN	COM
AIMB-270G2-00A1E	Yes	Yes	2	6

## Packing List

Part Number	Description	Quantity
1700003194	SATA HDD cable	x 2
1703150102	SATA power cable	x 2
1960051292N001	CPU cooler	x 1
1701400181	Cable kit for 4 serial ports	x 1
1960019193T100	I/O port bracket	x 1
20060270010	Startup manual	x 1
20660270000	Driver CD	x 1

## Optional Accessories

Part Number	Description
1700003195	USB cable with four ports, 17.5 cm
1700002204	USB cable with four ports, 27 cm
1700008461	USB cable with four ports, 30.5 cm
1700008822	DVI cable

## Embedded OS/API

OS/API	Part No.	Description
Win XPE	2070009655	XPE WES2009 QM57 AIMB-270 V4.0 ENG
	2070009656	XPE WES2009 QM57 AIMB-270 V4.0 MUI24
Software API	205E270001	SUSI 3.0 SW API for AIMB-270 XP

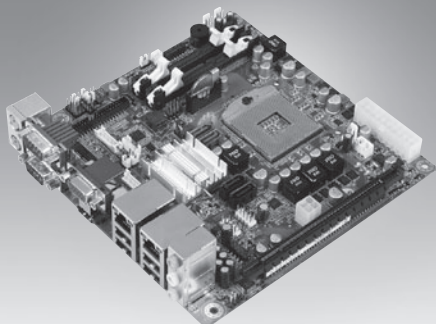
## Bracket View



# AIMB-272

Intel® Core™ i7/i5/i3/Celeron Mini-ITX with VGA/  
DVI/HDMI/LVDS, 6 x COM, Dual LAN, PCIe x16

NEW



## Specifications

Processor System	CPU	Intel Core i7-2710QE	Core i5-2510E	Core i3-2330E
	Core Number	4	2	2
	Max Speed	2.1 GHz	2.5 GHz	2.2 GHz
	L3 Cache	6 MB	3 MB	3 MB
	Chipset	QM67/HM65		
	BIOS	AMI EFI 64 Mbit SPI		
Expansion Slot	PCI	-		
	Mini-PCIe	1		
Memory	PCIe x16 (Gen2)	8 GB/s per direction, 1 slot		
	Technology	Dual Channel DDR3 1066/1333 MHz SDRAM		
	Max. Capacity	8 GB		
	Socket	2x 204 PIN DDR3 SODIMM		
Graphics	Controller	Integrated Gfx Gen5.75, supports DirectX 10 and OpenGL 2.1		
	VRAM	Shared system memory, 2 GB and above, total system memory shared 1 GB maximum video memory		
	VGA	Yes, supports max. resolution 2048 x 1536		
	LVDS	Single channel 24-bit/dual channel 48-bit LVDS		
	HDMI	Supports HDMI 1.4, 1650 Mbps/channel with 165 MHz		
	DVI	Yes, supports max resolution 1920 x 1200		
Ethernet	Dual Display	CRT+LVDS, CRT+DVI, DVI+HDMI, LVDS+HDMI, CRT+HDMI, DVI+LVDS		
	Interface	10/100/1000 Mbps		
	Controller	GbE LAN1: Intel 82579LM, LAN2: Intel 82583V		
SATA	Connector	RJ-45 x 2		
	Max Data Transfer Rate	600 MB/s (SATA 3.0)/ 300 MB/s (SATA 2.0)		
Rear I/O	Channel	2/2		
	VGA	1		
	HDMI	1		
	Ethernet	2		
	USB	4 (USB 2.0 compliant)		
	Audio	3 (Mic-in, Line-out, Line-in)		
Internal Connector	Serial	2 (RS-232)		
	PS/2	2 (1 x keyboard and 1 x mouse)		
	USB	4 (USB 2.0 compliant)		
	LVDS/inverter	1		
	DVI	1		
	Serial	4 (RS-232)		
	IDE	-		
	SATA	2 (SATA 3.0), 2 (SATA 2.0)		
	Mini-PCIe	1		
	Cfast	1		
Internal Connector	Parallel	-		
	IrDA	-		
	GPIO	8-bit		

## Features

- Supports Intel® Core™ i7/i5/i3 mobile processor (PGA) with Intel QM67/HM65 chipset
- Supports dual display of DVI, HDMI, LVDS, VGA
- Supports PCIe x16 (Gen 2) and mini PCIe
- Supports Intel vPro, AMT 7.0, PECI 3.0, Software RAID 0,1,5,10, TPM 1.2 (optional)
- Supports embedded software APIs and utilities

### Software APIs:



SMBus



H/W Monitor



Watchdog



GPIO



Brightness

### Utilities:



BIOS flash



eSOS



Monitoring



Embedded Security ID



Flash Lock

Note: eSOS requires ODM BIOS, available by request

Watchdog Timer	Output	System reset
	Interval	Programmable 1 ~ 255 sec/min
Power Requirements	Voltage@Current	+5 V@3.42 A; +3.3 V@1.1 A; +12 V@1.19 A; -12 V@0.07A; +5 VSB@0.5 A
		Operating Non-Operating
Environment	Temperature	0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution
		-20 ~ 70° C (-4 ~ 158° F)
Physical Characteristics	Dimensions	170 mm x 170 mm (6.69" x 6.69")

## Ordering Information

Part Number	Chipset	VGA	DVI	LVDS	HDMI	GbE LAN	COM
AIMB-272G2-00A1E	QM67	Yes	Yes	Yes	Yes	2	6
AIMB-272VG-00A1E	HM65	Yes	Yes	No	Yes	1	6

## Packing List

Part Number	Description	Quantity
1700003194	SATA HDD cable	x 2
1703150102	SATA power cable	x 2
1960051292N001	CPU cooler	x 2
1701400181	Cable kit for 4 serial ports	x 1
1960019192T100	I/O port bracket	x 1
20060272010	Startup manual	x 1
20660272000	Driver CD	x 1

## Optional Accessories

Part Number	Description
1700003195	USB cable with four ports, 17.5 cm
1700002204	USB cable with four ports, 27 cm
1700008461	USB cable with four ports, 30.5 cm
1700008822	DVI cable

## Bracket View



1  
Operator Panels

2  
Panel Computers

3  
Display Solutions

4  
Ethernet Switches

5  
Device Servers

6  
Serial Communication Cards

7  
Video Surveillance

8  
IPC Chassis

9  
SBCs and Backplanes

10  
Industrial Motherboards

11  
Embedded IPCs

12  
Server-grade IPCs

13  
IPC Peripherals

14  
DAQ Boards

15  
Signal Conditioning

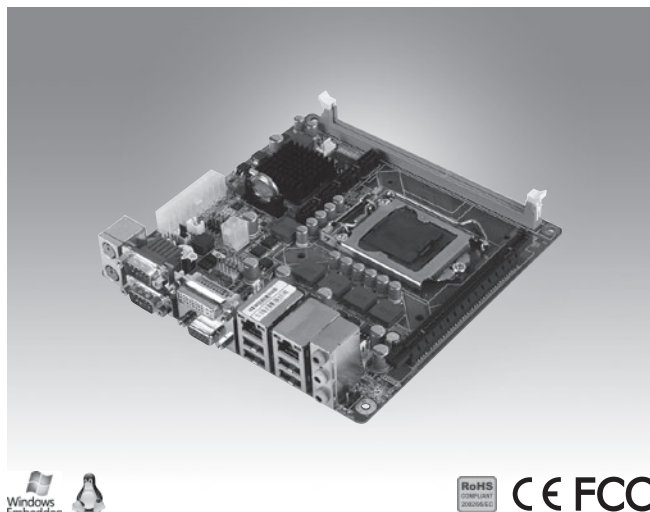
16  
USB DAQ Modules

17  
Embedded Controllers

18  
PACs

# AIMB-280

Intel® Core™ i7/i5/i3/Pentium® Mini-ITX  
with VGA/DVI, 2 x COM, Dual LAN, PCIe x16










## Specifications

Processor System	CPU	Core i7	Core i5 700	Core i5 600	Core i3	Pentium
	Max. Speed	4	4	2	2	2
	Max. speed	2.93 GHz	2.66 GHz	3.3 GHz	3.06 GHz	2.8 GHz
	Integrated Graphics	No	No	Yes	Yes	Yes
	L3 Cache	8 MB	8 MB	4 MB	4 MB	3 MB
	Chipset	Q57				
	BIOS	AMI 64 Mbit SPI				
Expansion Slot	PCI	-				
	Mini-PCI	-				
	PCIe x16 (Gen2)	8 GB/s per direction, 1 slot				
Memory	Technology	DDR3 800/1066/1333 MHz SDRAM				
	Max. Capacity	4 GB				
Graphics	Socket	1 x 240-pin DIMM				
	Controller	Intel HD Graphics				
	VRAM	1 GB maximum shared memory with 2 GB and above system memory installed				
Ethernet	Interface	10/100/1000 Mbps				
	Controller	GbE LAN1: Intel 82578DM, LAN2: Intel 82583V				
	Connector	RJ-45 x 2				
SATA	Max Data Transfer Rate	300 MB/s				
	Channel	4				
Rear I/O	VGA	1				
	DVI	1				
	Ethernet	2				
	USB	4 (USB 2.0 compliant)				
	Audio	3 (Mic-in, Line-out, Line-in)				
	Serial	2 (RS-232)				
	PS/2	2 (1 x keyboard and 1 x mouse)				
Internal Connector	USB	4 (USB 2.0 compliant)				
	Serial					
	IDE	-				
	SATA	4				
	CompactFlash	-				
	Parallel	-				
	IrDA	-				
Watchdog Timer	GPIO	-				
	Output	System reset				
Watchdog Timer	Interval	Programmable 1 ~ 255 sec/min				

## Features

- Supports Intel® Core™ i7/i5/i3/Pentium® processor with Q57 chipset
- One DIMM socket supports up to 4 GB DDR3 800/1066/1333 MHz SDRAM
- Supports dual display, VGA and DVI, and dual GbE LAN
- Supports 2 COM, 8 USB, and 4 SATA ports
- Supports embedded software APIs and utilities

Software APIs:				
	SMBus	H/W Monitor	Watchdog	
Utilities:				
	BIOS flash	eSOS	Monitoring	Embedded Security ID

Note: eSOS requires ODM BIOS, available by request

Power Requirements	Voltage@ Current	+5 V@1.85 A; +3.3 V@0.73 A; +12 V@3.14 A; -12 V@0.11A; +5 VSB@0.31 A
		Operating Non-Operating
Environment	Temperature	0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution
		-20 ~ 70° C (-4 ~ 158° F)
Physical Characteristics	Dimensions	170 mm x 170 mm (6.69" x 6.69")

## Ordering Information

Part Number	Chipset	VGA	DVI	SW RAID	USB	COM	GbE LAN
AIMB-280QG2-00A1E	Q57	Yes	Yes	Yes	8	2	2

## Packing List

Part Number	Description	Quantity
1700003194	SATA HDD cable	x 2
1703150102	SATA Power cable	x 2
1960019193T100	I/O port bracket	x 1
2002028010	Startup manual	x 1
2062028000	Driver CD	x 1

## Optional Accessories

Part Number	Description
1700002204	Dual port USB cable (27 cm) with bracket
1960047670N001	LGA1156 CPU cooler for 2U and wallmount chassis

## Embedded OS/API

OS/API	Part No.	Description
Win XPE	2070009652	XPE WES2009 Q57 AIMB-280/580/780 V4.0 ENG
	2070009653	XPE WES2009 Q57 AIMB-280/580/780 V4.0 MUI24
Software API	205E280000	SUSI 3.0 SW API for AIMB-280 XP

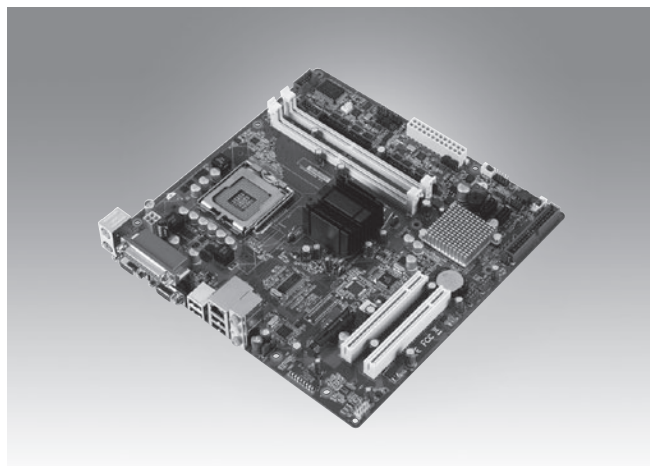
## Bracket View





# AIMB-562

LGA775 Intel® Core™2 Duo MicroATX  
with Dual VGA/LVDS, 10 x COM, LAN



## Specifications

<b>Processor System</b>	CPU (65 nm/90 nm)	Intel Core 2 Duo	Intel Pentium Dual-Core	Intel Pentium 4	Intel Celeron
	Max. Speed	E7400 2.8 GHz	E2200 2.2 GHz	651 3.4 GHz	440 2.0 GHz
	L2 Cache	4 MB	1 MB	2 MB	512 KB
	Chipset	Intel 945G/945GC + ICH7			
	BIOS	Award 16 Mbit, SPI			
	Front Side Bus	533/800/1066 MHz			
<b>Expansion Slot</b>	PCIe x16	-			
	PCIe x1	250 MB per direction, 1 slot			
	PCI	32-bit/33 MHz, 2 slots			
<b>Memory</b>	Technology	Dual channel DDR2 533/667 MHz SDRAM			
	Max. Capacity	4 GB			
	Socket	2 x 240-pin DIMM			
<b>Graphics</b>	Embedded	Intel GMA 950 sharing 224 MB system memory			
	LVDS	Supports single channel 24-bit/dual channel 48-bit LVDS, via Chronitel 7308B SDVO transmitter			
	2nd VGA	Supports 2nd CRT, via Chronitel 7317 SDVO transmitter			
	Dual Display	CRT + LVDS, CRT + CRT			
<b>Ethernet</b>	Interface	10/100/1000 Mbps			
	Controller	GbE LAN: Realtek 8111C			
	Connector	RJ-45 x 1			
<b>SATA II</b>	Max. Data Transfer Rate	300 MB/s			
	Channel	2			
<b>EIDE</b>	Mode	ATA 100/66/33			
	Channel	1 (max. 2 devices)			
<b>I/O Interface</b>	VGA	2			
	USB	8			
	Audio	2 (Line-out, Mic-in)			
	Serial	10 (8 of RS-232; 2 of RS-232/422/485 supports auto flow control)			
	Parallel	1 (SPP/EPP/ECP)			
	FDD	-			
	PS/2	2 (1 x keyboard and 1 x mouse)			
	GPIO	16-bit GPIO			
	Watchdog	System reset			
<b>Watchdog Timer</b>	Output	System reset			
	Interval	Programmable 1 ~ 255 sec/min			
<b>Power Requirements</b>	Power On	Intel Core 2 Duo E4300 1.8 GHz FSB 800 MHz, 1 GB DDR2 667 SDRAM			
	Voltage@Current	+5 V@4 A; +3.3 V@1.02 A; +12 V@2.35 A; -12 V@0.12 A; +5 VSB@0.26 A			
<b>Environment</b>	Operating	Non-Operating			
	Temperature	0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution			
<b>Physical Characteristics</b>	Dimensions	244 x 244 mm (9.6" x 9.6")			
	W x D				

## Features

- Intel® 945G/945GC chipset supports 533/800/1066 MHz FSB
- Dual channel DDR2 533/667 MHz SDRAM up to 4 GB
- Supports dual VGA and 24-bit LVDS panel, dual channel 3 W amplifier
- Supports 10 serial ports, 8 USB, 16-bit GPIO
- Supports embedded software APIs and utilities

### Software APIs:



### Utilities:



## Ordering Information

Part Number	Chipset	Display	COM	GbE LAN
AIMB-562VG-KSA1E	945G	2 CRT/LVDS	10	1
AIMB-562VG-GRA1E	945G	2 CRT	10	1
AIMB-562L-KSA1E	945GC	1 CRT	10	1

\*We strongly suggest using only Advantech's certified LGA775 CPU coolers to ensure board reliability under harsh conditions.

## Riser Card

Part Number	Description
AIMB-R430P-03A2E	2U riser card for 3 PCI expansion

## Packing List

Description	Quantity
IDE HDD cable	x 1
Serial ATA HDD data cable	x 2
Serial ATA HDD power cable	x 2
COM port cable kit	x 4
I/O port bracket	x 1
Startup manual	x 1
Utility CD	x 1

## Optional Accessories

Part Number	Description
1750000334	LGA775 CPU cooler (115 W)
1960022033T100	LGA775 CPU cooler for 2U chassis (2 VGA)
1960046434T000	LGA775 CPU cooler for 2U chassis (1 VGA)
1700008461	USB cable with four ports, 30.5 cm
1700002204	USB cable with dual ports, 27 cm
1700003195	USB cable with dual ports, 17.5 cm
1700008809	Printer port cable

## Bracket View



AIMB-562VG-KSA1E  
AIMB-562VG-GRA1E



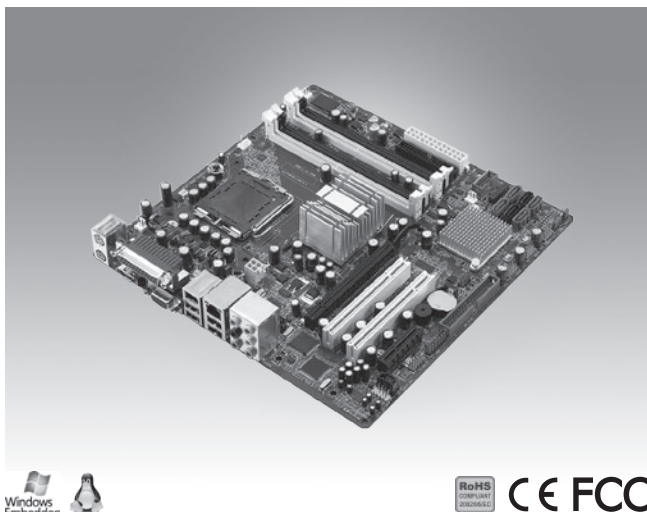
AIMB-562L-KSA1E

- Operator Panels
- Panel Computers
- Display Solutions
- Ethernet Switches
- Device Servers
- Serial Communication Cards
- Video Surveillance
- IPC Chassis
- SBCs and Backplanes
- Industrial Motherboards
- Embedded IPCs
- Server-grade IPCs
- IPC Peripherals
- DAQ Boards
- Signal Conditioning
- USB DAQ Modules
- Embedded Controllers
- PACs



# AIMB-564

**LGA775 Intel® Core™2 Quad/Core™2 Duo MicroATX with VGA, PCIe, Software RAID, and LAN**



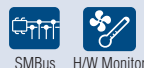
## Specifications

<b>Processor System</b>	CPU (65nm/ 90nm)	Intel Core 2 Quad	Intel Core 2 Duo	Intel Pentium Dual-Core	Intel Pentium 4	Intel Celeron D
	Max. Speed	Q6700 2.66 GHz	E7400 2.8 GHz	E2200 2.2 GHz	672 3.8 GHz	352 3.2 GHz
	L2 Cache	8 MB	3 MB	1 MB	2 MB/1 MB	512 KB
	Chipset	Intel Q965+ICH8 DO				
	BIOS	AMI 16 Mbit, SPI				
	Front Side Bus	533/800/1066 MHz				
<b>Expansion Slot</b>	PCIe x16	4.0 GB/s per direction, 1 slot				
	PCIe x4	1.0 GB/s per direction, 1 slot				
	PCI	32-bit/33 MHz, 2 slots				
<b>Memory</b>	Technology	Dual channel DDR2 533/667/800 MHz SDRAM				
	Max. Capacity	8 GB				
	Socket	4 x 240-pin DIMM				
<b>Graphics</b>	Embedded	Intel GMA 3000 sharing 256 MB system memory				
	Add-on	PCIe x 16 slot				
<b>Ethernet</b>	Interface	10/100/1000 Mbps				
	Controller	GbE LAN: Intel 82566DM				
	Connector	RJ-45 x 1				
<b>SATA II</b>	Max. Data Transfer Rate	300 MB/s				
	Channel	7				
<b>EIDE</b>	Mode	ATA 100/66/33				
	Channel	1 (max. 2 devices)				
<b>I/O Interface</b>	VGA	1				
	USB	10				
	Audio	8-CH HD Audio (Mic-in, Line-in, Line-out, CD-in, 6 jacks)				
	Serial	1 (RS-232)				
	Parallel	1 (SPP/EPP/ECP)				
	FDD	1				
	PS/2	2 (1 x keyboard and 1 x mouse)				
	eSATA	1				
	IEEE 1394	2 (1 on rear panel, 1 on internal connector)				
<b>Watchdog Timer</b>	Output	System reset				
	Interval	Programmable 1~255 sec/min				
<b>Power Requirements</b>	Power On	Pentium 4 3.4 GHz, 1 GB SDRAM, 80 GB HDD				
	Voltage@ Current	+5 V@10.37 A; +3.3 V@2.83 A; +12 V@3.07 A; +5 VSB@0.46 A				
		Operating Non-Operating				
<b>Environment</b>	Temperature	0 ~ 60° C (32 ~ 131° F), depends on CPU speed and cooler solution				
		-20 ~ 70° C (-4 ~ 158° F)				
<b>Physical Characteristics</b>	Dimensions (W x D)	244 x 244 mm (9.6" x 9.6")				

## Features

- Intel® Q965 chipset 533/800/1066 MHz FSB
- Supports Intel® Core™ 2 Quad/Core™ 2 Duo processor
- Dual channel DDR2 533/667/800 MHz SDRAM up to 8 GB
- Chipset integrated VGA sharing 256 MB system memory
- PCIe x16 slot expansion
- Supports SATA RAID 0, 1, 5, and 10
- Supports single 10/100/1000 Mbps Ethernet via dedicated PCIe x1 bus

### Software APIs:



### Utilities:



## Ordering Information

Part Number	VGA	GbE LAN
AIMB-564VG-00A1E	Yes	Single

\*AIMB-564 cannot be installed in ACP-2000MB and 1U chassis.

\*\*We strongly suggest using only Advantech's certified LGA 775 CPU coolers to ensure board reliability under harsh conditions.

## Riser Card

Part Number	Description
AIMB-RP3PF-21A1E	2U riser card for 1 PCIe x16 and 2 PCI expansion

## Packing List

Description	Quantity
IDE HDD cable	x 1
Serial ATA HDD data cable	x 4
Serial ATA HDD power cable	x 2
I/O port bracket	x 1
Startup manual	x 1
Utility CD	x 1

## Optional Accessories

Part Number	Description
1750000334	LGA775 CPU cooler (115 W)
1960022033T000	LGA775 CPU cooler for 2U chassis
1700006915	Power relay cable to activate ACP-4000 LED indicators
1700006916	Power relay cable to activate IPC-610H LED indicators

## Embedded OS/API

OS/API	Part No.	Description
Win XPE	2070003977	XPE SP2 FP2007 AIMB-564 V3.1 ENG 792.81 MB
	2070006570	XPE FP2007 AIMB-564 V3.01 CHT
Software API	205E564010	SUSI 3.0 SW API for AIMB-564 XP

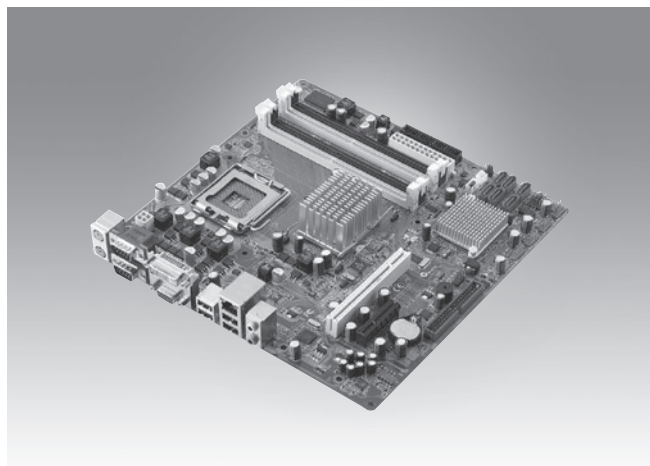
## Bracket View



AIMB-564VG-00A1E

# AIMB-566

LGA775 Intel® Core™2 Quad/Core™2 Duo  
MicroATX with VGA/DVI, 2 x COM, and LAN



## Specifications

Processor System	CPU (45/65/90nm)	Intel Core 2 Quad	Intel Core 2 Duo	Intel Pentium Dual-Core	Intel Celeron
	Max. Speed	Q9400 2.66 GHz	E8500 3.16 GHz	E5300 2.6 GHz	440 2.0 GHz
	L2 Cache	6 MB	6 MB	2 MB	512 KB
	Chipset	Intel Q35 + ICH9 DO			
	BIOS	AMI 32 Mbit, SPI			
Expansion Slot	Front Side Bus	800/1066/1333 MHz			
	PCIe x4	1 GB/s per direction, 1 slot			
	PCI	32-bit/33 MHz, 1 slot			
Memory	Technology	Dual channel DDR2 667/800 MHz SDRAM			
	Max. Capacity	8 GB			
	Socket	4 x 240-pin DIMM			
Graphics	Embedded	Chipset integrated VGA controller			
	DVI	Yes, via Chronitel 7307C SDVO transmitter			
	Dual Display	CRT + DVI			
Ethernet	Interface	10/100/1000 Mbps			
	Controller	Intel 82566DM			
	Connector	RJ-45 x 1			
SATA II	Max. Data Transfer Rate	300 MB/s			
	Channel	6			
EIDE	Mode	ATA 100/66/33			
	Channel	1 (max. 2 devices)			
I/O Interface	VGA	1			
	DVI-D	1			
	USB	12			
	Audio	2 (Mic-in, Line-out)			
	Serial	2 (RS-232)			
	FDD	1			
	PS/2	2 (1 x keyboard and 1 x mouse)			
Watchdog Timer	Output	System reset			
	Interval	Programmable 1~ 255 sec/min			
Power Requirements	Power On	Intel Core 2 Quad 9300 2.5 GHz, 8 GB DDR2 800 SDRAM			
	Voltage@ Current	+5 V@3.15 A; +3.3 V@2.01 A; +12 V@3.36 A; -12 V@0.08 A; +5 VSB@0.88 A			
	Operating	Non-Operating			
Environment	Temperature	0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution			
		-20 ~ 70° C (-4 ~ 158° F)			
Physical Characteristics	Dimensions (W x D)	244 mm x 244 mm (9.6" x 9.6")			

## Features

- Intel® Q35 and ICH9 DO supporting 800/1066/1333 MHz FSB
- Supports dual core and quad core processors with 45nm processing
- Dual channel DDR2 667/800 MHz SDRAM up to 8 GB
- Supports dual display, VGA and DVI-D
- Supports embedded software APIs and utilities

### Software APIs:



H/W Monitor



Watchdog

### Utilities:



BIOS flash



Monitoring

## Ordering Information

	VGA	DVI	GbE	COM	SATA
AIMB-566VG-00A1E	1	1	1	2	6

\*We strongly suggest using only Advantech's certified LGA775 CPU coolers to ensure board reliability under harsh conditions.

## Riser Card

Part Number	Description
AIMB-RP10P-01A1E	1U riser card for 1 PCI expansion
AIMB-RP30P-03A1E	2U riser card for 3 PCI expansion

## Packing List

Description	Quantity
IDE HDD cable	x 1
Floppy cable	x 1
Serial ATA HDD data cable	x 2
Serial ATA HDD power cable	x 2
I/O port bracket	x 1
Startup manual	x 1
Utility CD	x 1

## Optional Accessories

Part Number	Description
1750000334	LGA775 CPU cooler (115 W)
1960022033T000	LGA775 CPU cooler for 2U chassis
1700003195	USB cable with two ports, 17.5 cm
1700002204	USB cable with two ports, 27 cm
1700008461	USB cable with four ports, 30.5 cm

## Embedded OS/API

OS/API	Part No.	Description
Win XPE	2070005289	XPE FP2007 AIMB-566 V3.01 ENG
	2070005290	XPE FP2007 AIMB-566 V3.01 CH
Software API	205E000021	SUSI 3.0 SW API for AIMB-566 XP

## Bracket View

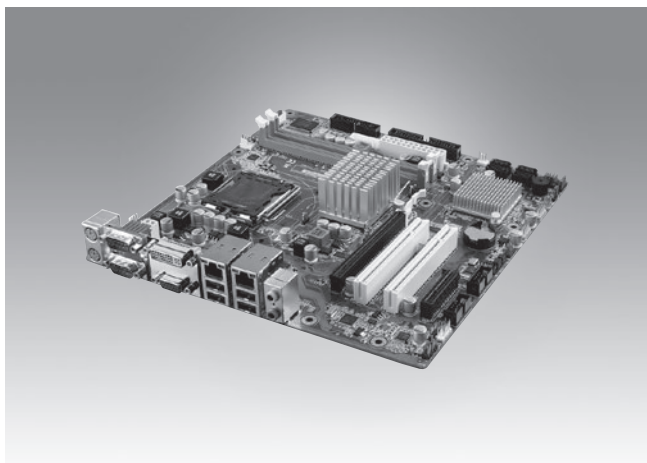


AIMB-566VG-00A1E

- Operator Panels
- Panel Computers
- Display Solutions
- Ethernet Switches
- Device Servers
- Serial Communication Cards
- Video Surveillance
- IPC Chassis
- SBCs and Backplanes
- Industrial Motherboards
- Embedded IPCs
- Server-grade IPCs
- IPC Peripherals
- DAQ Boards
- Signal Conditioning
- USB DAQ Modules
- Embedded Controllers
- PACs

# AIMB-567

**LGA775 Intel® Core™2 Quad MicroATX  
with Dual VGA/DVI, 4 x COM, Dual LAN**



## Specifications

Processor System	CPU (45 nm/65 nm)	Intel Core 2 Quad	Intel Core 2 Duo	Intel Pentium Dual-Core	Intel Celeron
	Max. Speed	Q9400 2.66 GHz	E8500 3.16 GHz	E6500 2.6 GHz	E1500 2.2 GHz
	L2 Cache	6 MB	6 MB	6 MB	512 KB
	Chipset	Intel G41+ICH7(VG), Intel G41+ICH7R(G2)			
	BIOS	AMI 16 Mbit, SPI			
Expansion Slot	Front Side Bus	800/1066/1333 MHz			
	PCIe x16 (Gen2)	4.0 GB/s per direction, 1 slot			
	PCIe x4	1 GB/s per direction, 1 slot (G2)			
	PCIe x1	250 MB per direction, 1 slot(VG)			
	PCI	32-bit/33 MHz, 2 slots			
Memory	Technology	Dual channel DDR3 800/1066/1333 MHz SDRAM			
	Max. Capacity	4 GB			
	Socket	2 x 240-pin DIMM			
Graphics	Embedded	Intel GMA X4500 shared 352 MB system memory			
	DVI	Yes (If DVI is used, PCIe x16 is automatically disabled), Chronitel 7318C Transmitter			
	Dual Display	CRT+DVI			
Ethernet	Interface	10/100/1000 Mbps			
	Controller	GbE LAN1: Intel 82583V, GbE LAN2: Intel 82583V			
	Connector	RJ-45 x 2			
SATA II	Max. Data Transfer Rate	300 MB/s			
	Channel	4			
EIDE	Mode	ATA 100/66/33			
	Channel	1 (max. 2 devices)			
Rear I/O	VGA	1			
	DVI	1			
	Ethernet	2			
	USB	4 (USB 2.0)			
	Audio	2 (Mic-in, Line-out)			
	Serial	2 (RS-232)			
	PS/2	2 (1 x keyboard and 1 x mouse)			
Internal Connector	USB	4 (USB 2.0)			
	Serial	2 (1 x RS-232, 1 x RS-232/422/485 to support auto flow control)			
	IDE	1			
	SATA	4			
	FDD	-			
	Parallel	1			
	GPIO	8-bit GPIO			
Watchdog Timer	Output	System reset			
	Interval	Programmable 1 ~ 255 sec/min			
	Power On	Intel Core 2 Quad Q9400 2.66 GHz FSB 1333 MHz, 4 GB DDR3 1066 SDRAM			
Power Requirement	Voltage@Current	+5 V@2.98 A; +3.3 V@0.19 A; +12 V@3.48 A; -12 V@0.18 A; +5 VSB@0.18 A			
	Operating	Non-Operating			
Environment	Temperature	0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution			
	Temperature	-20 ~ 70° C (-4 ~ 158° F)			
Physical Characteristics	Dimensions (W x D)	244 x 244 mm (9.6" x 9.6")			

## Features

- Intel® G41 chipset supports 800/1066/1333 MHz FSB
- Dual channel DDR3 800/1066/1333 MHz SDRAM up to 4 GB
- Supports dual display, VGA and DVI-D
- Supports dual core and quad core processors with 45nm processing
- Supports SATA RAID 0,1,5,10 for G2 version
- Supports Embedded Software APIs and utilities

### Software APIs:



### Utilities:



## Ordering Information

Part Number	Chipset	Display	GbE	SW RAID	PCIe x4	PCIe x1
AIMB-567G2-00A1E	G41/ICH7R	VGA/DVI	2	Yes	1	-
AIMB-562VG-00A1E	G41/ICH7	VGA	1	No	-	1

\*We strongly suggest using only Advantech's certified LGA775 CPU coolers to ensure board reliability under harsh conditions.

## Riser Card

Part Number	Description
AIMB-RP3PF-21A1E	2U riser card with 1 PCIe x16 & 2 PCI slot expansion
AIMB-RP3OP-03A1E	2U riser card for 3 PCI expansion
AIMB-RP10P-01A1E	1U riser card for 1 PCI expansion

## Packing List

Description	Quantity
IDE HDD cable	x 1
Serial ATA HDD data cable	x 2
Serial ATA HDD power cable	x 2
COM port cable kit	x 2
I/O port bracket	x 1
Startup manual	x 1
Utility CD	x 1

## Accessories

Part Number	Description
1750000334	LGA775 CPU cooler (115 W)
1960022033T100	LGA775 CPU cooler for 2U chassis
1700008461	USB cable with four ports, 30.5 cm
1700002204	USB cable with dual ports, 27 cm
1700003195	USB cable with dual ports, 17.5 cm
1700008809	Printer port cable
1700018699	KBMS cable 1*6P-2.5/DIN-6P(F)*2, 25 cm

## Bracket View



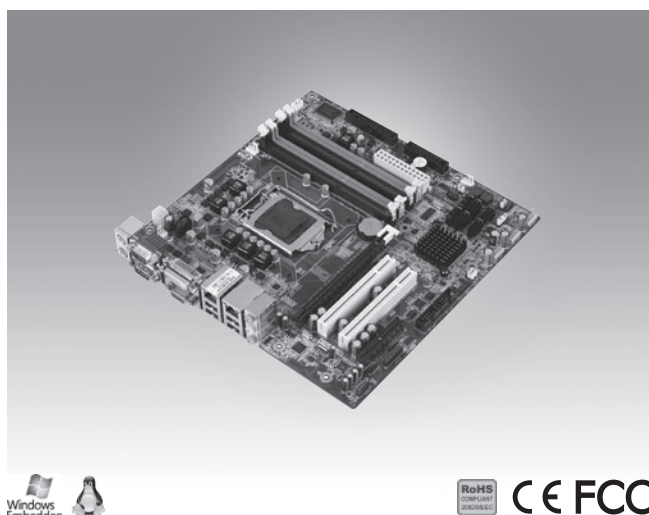
AIMB-567G2-00A1E



AIMB-567VG-00A1E

# AIMB-580

Intel® Core™ i7/i5/i3/Pentium®/Xeon with  
VGA/DVI, 4 x COM, Dual LAN



## Specifications

Processor System	CPU	Xeon 34xx	Intel Core i7 8xx	Intel Core i5 7xx	Intel Core i5 6xx	Intel Core i3 5xx	Intel Pentium G69xx
	Core number	4	4	4	2	2	2
Expansion Slot	Max.speed	2.93 GHz	2.93 GHz	2.66 GHz	3.3 GHz	3.06 GHz	2.8 GHz
	Integrated Graphic	No	No	No	Yes	Yes	Yes
Memory	L3 Cache	8 MB	8 MB	8 MB	4 MB	4 MB	3 MB
	Support model	WG2	QG2	QG2	WG2/ QG2	WG2/ QG2	WG2/ QG2
Graphics	Chipset	Q57/3450					
	BIOS	AMI 64 Mbit SPI					
Ethernet	PCI	32-bit/33 MHz, 2 slots					
	PCIe x4	1.0 GB/s per direction, 1 slot					
SATA	PCIe x16 (Gen2)	8 GB/s per direction, 1 slot					
	Technology	Dual Channel DDR3 800/1066/1333 MHz SDRAM					
Rear I/O	Max. Capacity	16 GB					
	Socket	4 x 240-pin DIMM					
Internal Connector	Controller	Intel HD Graphics					
	VRAM	1 GB maximum shared memory with 2 GB and above system memory installed					
Watchdog Timer	Interface	10/100/1000 Mbps					
	Controller	GbE LAN1: Intel 82578DM, GbE LAN2: Intel 82583V					
Power Requirements	Connector	RJ-45 x 2					
	Max Data Transfer Rate	300 MB/s					
Environment	Channel	6					
	VGA	1					
Physical Characteristics	DVI	1					
	Ethernet	2					
OS/API	USB	4 (USB 2.0 compliant)					
	Audio	2 (Mic-in, Line-out)					
Bracket View	Serial	2 (RS-232)					
	PS/2	2 (1 x keyboard and 1 x mouse)					
Watchdog Timer	USB	6 (USB 2.0 compliant)					
	Serial	2 (1 x RS-232, 1 x RS-232/422/485 to support auto flow control)					
Power Requirements	IDE	-					
	SATA	6					
Environment	FDD	1					
	Parallel	1					
Physical Characteristics	IrDA	-					
	GPIO	-					
OS/API	Output	System reset					
	Interval	Programmable 1 ~ 255 sec/min					
Power Requirements	Power On	Intel Core i5-660 3.33GHz, 2GB DDR3 1333 MHz x 4pcs					
	Voltage@ Current	+5 V@3.9 A; +3.3 V@0.67 A; +12 V@3.84 A; -12 V@0.24A; +5 VSB@0.23 A					
Environment	Operating	Non-Operating					
	Temperature	0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution					
Physical Characteristics	Dimensions	244 mm x 244 mm (9.6" x 9.6")					

## Features

- Supports Intel® Core™ i7/i5/i3/Pentium/Xeon processor with Q57/3450 chipset
- Four DIMM socket supports up to 16 GB DDR3 800/1066/1333 MHz SDRAM
- Supports dual display of VGA and DVI and dual GbE LAN
- Supports SATA RAID 0, 1, 5, 10, AMT 6.0, TPM 1.2 (optional)
- Supports embedded software APIs and utilities

### Software APIs:



### Utilities:



Note: eSOS requires ODM BIOS, available by request

## Ordering Information

Part Number	Chipset	Memory	VGA	DVI	USB	COM	GbE LAN
AIMB-580QG2-00A1E	Q57	Non-ECC	Yes	Yes	10	4	2
AIMB-580WG2-00A1E	3450	ECC/Non-ECC	Yes	Yes	10	4	2

## Riser Card

Part Number	Description
AIMB-RP10P-01A1E	1U riser card with 1 PCI expansion
AIMB-RP30P-03A1E	2U riser card with 3 PCI expansion
AIMB-RP3PF-21A1E	2U riser card for 1 PCIe x 16 and 2 PCI expansion
AIMB-RP3P8-12A1E	2U riser card with 2 PCIe x 8 & 1 PCI slots expansion (For WG2 Sku)

## Packing List

Part Number	Description	Quantity
1700340640	FDD cable	x 1
1700003194	SATA HDD cable	x 2
1703150102	SATA power cable	x 2
1960019193T100	I/O port bracket	x 1
2002058000	Startup manual	x 1
2062058000	Driver CD	x 1

## Optional Accessories

Part Number	Description
1700002204	Dual port USB cable (27 cm) with bracket
1960047669N001	LGA1156 CPU cooler for 4U and wallmount chassis
1960047831N001	LGA1156 CPU cooler for 2U and wallmount chassis
1960049408N001	LGA1156 CPU cooler for 1U and wallmount chassis
1700008809	Printer port cable kit

Note: Purchasing AIMB-580's proprietary CPU cooler from Advantech is a must. Other brands' CPU cooler are NOT compatible with AIMB-580.

## Embedded OS/API

OS/API	Part No.	Description
Win XPE	2070009652	XPE WES2009 Q57_AIMB-280/580/780 V4.0 ENG
Software API	2070009653	XPE WES2009 Q57_AIMB-280/580/780 V4.0 MUI24
	205E80000	SUSI 3.0 SW API for AIMB-580 XP

## Bracket View



AIMB-580QG2-00A1E  
AIMB-580WG2-00A1E

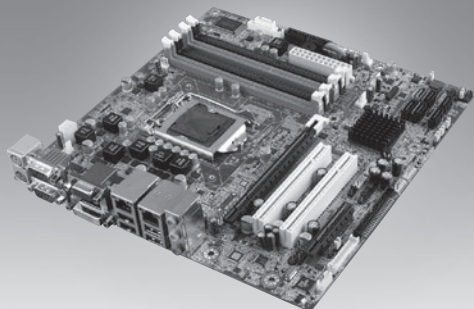
- Operator Panels
- Panel Computers
- Display Solutions
- Ethernet Switches
- Device Servers
- Serial Communication Cards
- Video Surveillance
- IPC Chassis
- SBCs and Backplanes
- Industrial Motherboards
- Embedded IPCs
- Server-grade IPCs
- IPC Peripherals
- DAQ Boards
- Signal Conditioning
- USB DAQ Modules
- Embedded Controllers
- PACs



# AIMB-581

LGA1155 Intel® Core™ i7/i5/i3 MicroATX  
with VGA/DVI/LVDS, 4 x COM, and Dual LAN

NEW



## Specifications

Processor System	CPU	Intel Core i7-2600	Intel Core i5-2400	Intel Core i3-2120
	Core number	4	4	2
	Max. speed	3.4 GHz	3.1 GHz	3.3 GHz
	Integrated Graphic	Yes	Yes	Yes
	L3 Cache	8 MB	6 MB	3 MB
	Chipset	Q67/B65/C206		
Expansion Slot	BIOS	AMI 64 Mbit SPI		
	PCI	32-bit/33 MHz, 2 slots		
	PCIe x4 (Gen2)	2.0 GB/s per direction, 1 slot		
Memory	PCIe x16 (Gen2)	8 GB/s per direction, 1 slot		
	Technology	Dual Channel DDR3 1066/1333 MHz SDRAM		
	Max. Capacity	16 GB		
Graphics	Socket	4 x 240-pin DIMM		
	Controller	Intel HD Graphics		
	VRAM	1 GB maximum shared memory with 2 GB and above system memory installed		
	LVDS	Single channel 24-bit/dual channel 48-bit LVDS		
	1st DVI	Yes, supports max. resolution 1920 x 1200		
	2nd DVI	Yes, with internal pin header, supports max. resolution 1920 x 1200		
Ethernet	Dual Display	CRT+LVDS, CRT+DVI, LVDS+DVI		
	Interface	10/100/1000 Mbps		
	Controller	GbE LAN1: Intel 82579LM, GbE LAN2: Intel 82583V		
SATA	Connector	RJ-45 x 2		
	Max Data Transfer Rate	600 MB/s (SATA 3.0)/ 300 MB/s (SATA 2.0)		
Rear I/O	Channel	2/4		
	VGA	1		
	DVI	1		
	Ethernet	2		
	USB	4 (2 USB 2.0, 2 USB 3.0)		
	Audio	2 (Mic-in, Line-out)		
Internal Connector	Serial	2 (RS-232)		
	PS/2	2 (1 x keyboard and 1 x mouse)		
	USB	6 (USB 2.0 compliant)		
	Serial	4 (3 x RS-232, 1 x RS-232/422/485 to support auto flow control)		
	IDE	-		
	SATA	2 x 600 MB/s (SATA 3.0)/4 x 300 MB/s (SATA 2.0)		
	LVDS & Inverter	1		
	Parallel	1		
	IrDA	-		
	GPIO	8-bit GPIO		
Watchdog Timer	Output	System reset		
	Interval	Programmable 1 ~ 255 sec/min		
Power Requirements	Power On	Intel Core i5-660 3.33GHz, 2GB DDR3 1333 MHz x 4pcs		
	Voltage@Current	+5 V@3.9 A; +3.3 V@0.67 A; +12 V@3.84 A; -12 V@0.24 A; +5 VSB@0.23 A		
Environment		Operating	Non-Operating	
	Temperature	0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution	-20 ~ 70° C (-4 ~ 158° F)	

## Features

- Supports Intel® Core™ i7/i5/i3 processor with Q67/B65/C206 chipset
- Four DIMM socket supports up to 16 GB DDR3 1066/1333 MHz SDRAM
- Supports dual display of VGA, DVI, LVDS and dual GbE LAN
- Supports Intel vPro, AMT 7.0, PECI 3.0, USB 3.0, Software RAID 0, 1, 5, 10, TPM 1.2 (optional)
- Supports embedded software APIs and utilities

### Software APIs:



### Utilities:



Note: eSOS requires ODM BIOS, available by request

## Physical Characteristics

Dimensions	244 mm x 244 mm (9.6" x 9.6")
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## Ordering Information

Part Number	Chipset	Memory	VGA	DVI	LVDS	USB	COM	GbE LAN
AIMB-581QG2-00A1E	Q67	Non-ECC	Yes	Yes	Yes	12	4	2
AIMB-581QVG-00A1E	B65	Non-ECC	Yes	Yes	No	12	4	1
AIMB-581WG2-00A1E	C206	ECC/Non-ECC	Yes	Yes	Yes	12	4	2

## Riser Card

Part Number	Description
AIMB-RP10P-01A1E	1U riser card with 1 PCI expansion
AIMB-RP30P-03A1E	2U riser card with 3 PCI expansion
AIMB-RP3PF-12A1E	2U riser card for 1 PCIe x 16 abd 2 PCI expansion
AIMB-RP3P8-12A1E	2U riser card with 2 PCIe x 8 & 1 PCI slots expansion (For WG2 Sku)

## Packing List

Part Number	Description	Quantity
1700003194	SATA HDD cable	x 2
1703150102	SATA power cable	x 2
2002058100	Startup manual	x 1
2062058100	Driver CD	x 1

## Optional Accessories

Part Number	Description
1700002204	Dual port USB cable (27 cm) with bracket
1960047669N001	LGA1156 CPU cooler for 4U and wallmount chassis
1960047831N001	LGA1156 CPU cooler for 2U and wallmount chassis
1960049408N001	LGA1156 CPU cooler for 1U and wallmount chassis
1700008809	Printer port cable kit
1700018699	KBMS cable 1*6P-2.5/DIN-6P(F)*2, 25 cm

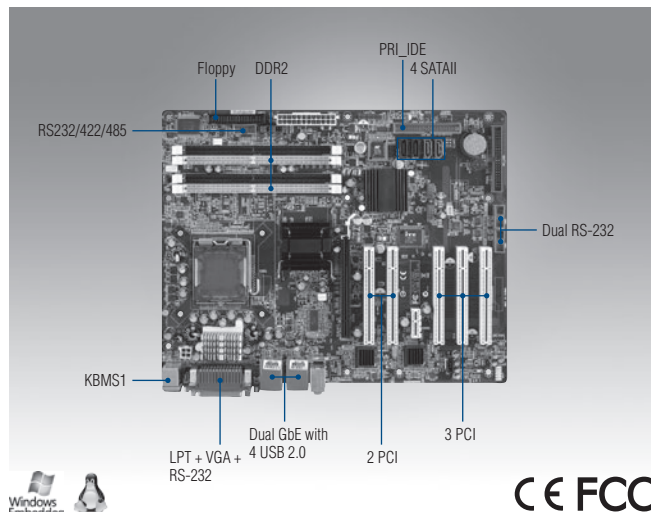
## Bracket View





# AIMB-763

LGA775 Intel® Core™2 Duo/Pentium® 4 ATX with  
VGA, 4 x COM, Software RAID, and Dual LAN



## Specifications

<b>Processor System</b>	CPU (45nm/65nm/90nm)	Intel Core 2 Duo	Intel Pentium dual-core	Intel Pentium 4	Intel Celeron D
	Max. Speed	E7400 2.2.8 GHz	E2200 2.2 GHz	651 3.4 GHz	352 3.2 GHz
	L2 Cache	3 MB	1 MB	2 MB	512 KB/256 KB
<b>Expansion Slot</b>	Chipset	Intel 945G + ICH7 (ICH7R for G2 version)			
	BIOS	Award 8 Mbit, FWH			
	Front Side Bus	533/800/1066 MHz			
	PCIe x16	4.0 GB/s per direction, 1 slot			
	PCIe x1	250 MB per direction, 1 slot			
<b>Memory</b>	Technology	Dual channel DDR2 533/667 MHz			
	Max. Capacity	4 GB			
	Socket	4 x 240-pin DIMM			
<b>Graphics</b>	Embedded	Intel GMA 950 sharing 224 MB system memory			
	Add-on	PCIe x16 slot			
<b>Ethernet</b>	Interface	10/100/1000 Mbps			
	Controller	GbE LAN1: Intel 82573L; GbE LAN2: Intel 82573L			
	Connector	RJ-45 x 2			
<b>SATA II</b>	Max. Data Transfer Rate	300 MB/s			
	Channel	4			
<b>EIDE</b>	Mode	ATA 100/66/33			
	Channel	1 (max. 2 devices) (2 for G2 version)			
<b>Rear I/O</b>	VGA	1			
	Ethernet	2 for VG version; 1 for G2 version			
	USB	4			
	Audio	3 (Line-out, Line-in, Mic-in)			
	Serial	1			
	Parallel	1 (SPP/EPP/ECP)			
	PS/2	2 (1 x keyboard and 1 x mouse)			
	USB	4			
<b>Internal Connectors</b>	Serial	1 (for VG version); 3 (for G2 version). COM2 supports RS-232/422/485			
	EIDE	1 for VG version (max. 2 devices) and 2 for G2 version			
	SATA	4			
	FDD	1			
	Watchdog Timer	Output: Interrupt, system reset Interval: Programmable 1 ~ 255 sec/min			
<b>Power Requirement</b>	Power On	Pentium 4 3.8 GHz (800 MHz FSB), 4 x 1 GB DDR2 667 SDRAM			
	Voltage@ Current	+5 V@3.10 A; +3.3 V@1.54 A; +12 V@9.90 A			

## Features

- Supports Intel® Core™2 Duo FSB 800/1066 MHz
- Dual channel DDR2 533/667 SDRAM up to 4 GB
- Chipset integrated VGA sharing 224 MB system memory
- PCIe x16 slot for VGA card
- Supports 10/100/1000 Mbps Ethernet via dedicated PCIe x1 bus
- Supports SATA RAID 0,1,5 and 10 for G2 version

Environment	Temperature	Operating	Non-Operating
		0 ~ 60 °C (32 ~ 140 °F), depends on CPU speed and cooler solution.	-20 ~ 70 °C (-4 ~ 158 °F)
Physical Characteristics	Dimensions (W x D)	304.8 x 244 mm (12" x 9.6")	

## Ordering Information

Part Number	GbE LAN	COM	SATA SW RAID	IDE RAID
AIMB-763VG-00A1E	1	2	None	None
AIMB-763G2-00A1E	2	4	Yes	None

## Riser Card

Part Number	Description
AIMB-RP3PF-21A1E	2U riser card with 1PClex16 & 2PCI slot expansion

## Packing List

Description	Quantity
FDD cable	x 1
IDE HDD cable	x 1
Serial ATA HDD data cable	x 2
Serial ATA HDD power cable	x 2
COM port cable kit	x 1
I/O port bracket	x 1
Startup manual	x 1
Utility CD	x 1

## Optional Accessories

Part Number	Description
1750000334	LGA775 CPU cooler up to 3.8 GHz (115 W), 4U, 5U and 7U chassis
1960022033T000	LGA775 CPU cooler for 2U chassis
1700006915	Power relay cable to activate ACP-4000 LED indicators
1700006916	Power relay cable to activate IPC-610H LED indicators
1700006917	PS/2 cable to active ACP-2010MB/2320MB/4000MB & IPC-510MB/610MB-H/7143/7220 keyboard/mouse function

## Bracket View



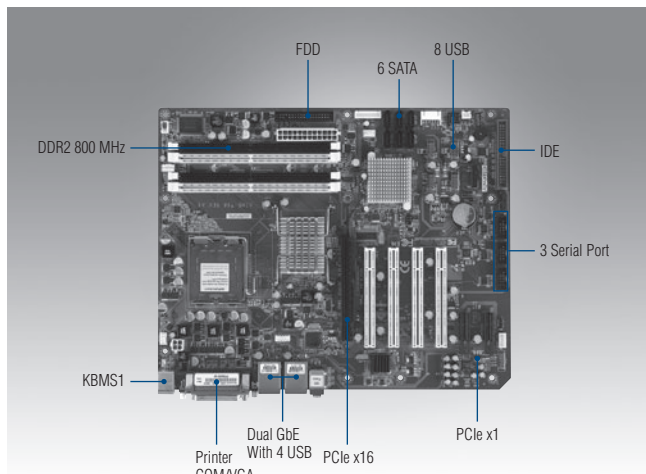
AIMB-763VG-00A1E



AIMB-763G2-00A1E

# AIMB-766

LGA775 Intel® Core™ 2 Quad/Core™ 2 Duo  
ATX with VGA, 4 x COM, and Dual LAN



## Specifications

Processor System	CPU (45/65nm)	Intel Core 2 Quad	Intel Core 2 Duo	Intel Pentium Dual-Core	Intel Celeron
	Max. Speed	Q9400 2.66 GHz	E8400 3.0 GHz	E5300 2.6 GHz	440 2.0 GHz
	L2 Cache	6 MB	6 MB	2 MB	512 KB
Expansion Slot	Chipset	Intel Q35 + ICH9 DO			
	BIOS	AMI 32 Mbit, SPI			
	Front Side Bus	800/1066/1333 MHz			
	PCIe x16	4.0 GB/s per direction, 1 slot			
Memory	PCIe x1	250 MB/s per direction, 2 slot			
	PCI	32-bit/33 MHz, 4 slots			
	Technology	Dual channel DDR2 667/800 MHz			
Graphics	Max. Capacity	8 GB			
	Socket	4x 240-pin DIMM			
	Embedded	Intel GMA 3100 sharing 384 MB system memory			
Ethernet	Add-on	PCIe x16 slot			
	Interface	10/100/1000 Mbps			
	Controller	GbE-LAN1: Intel 82566DM, GbE-LAN2: Intel 82573L			
SATA II	Connector	RJ-45 x 2			
	Max. Data Transfer Rate	300 MB/s			
	Channel	6			
EIDE	Mode	ATA 100/66/33			
	Channel	1 (max. 2 devices)			
	VGA	1			
Rear I/O	USB	12			
	Audio	2 (Mic-in, Line-out)			
	Serial	4 (3 x RS-232, 1 x RS-232/422/485)			
	Parallel	1 (SPP/EPP/ECP)			
	FDD	1			
	PS/2	2 (1 x keyboard and 1 x mouse)			
	USB	8			
Internal Connectors	Serial	3 (2 x RS-232, 1 x RS-232/422/485)			
	IDE	1			
	SATA	6			
	FDD	1			
Watchdog Timer	Output	System reset			
	Interval	Programmable 1~ 255 sec/min			
Power Requirement	Power On	Intel Core 2 Quad9300 2.5 Ghz (1333 MHz FSB), 4 x 1 GB DDR2 800 SDRAM			
	Voltage@ Current	+5 V@3.58 A; +3.3 V@2.86 A; +12 V@3.52 A; -12 V@0.02A; +5 VSB@0.74 A			
Environment	Operating	Non-Operating			
	Temperature	0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution -20 ~ 70° C (-4 ~ 158° F)			

## Features

- Intel® Q35 and ICH9 DO supporting 800/1066/1333 MHz FSB
- Supports dual core and quad core process with 45nm processing
- Dual channel DDR2 667/800 SDRAM up to 8 GB
- Supports 4 PCI, 2 PCIe x1, 6 SATA ports and dual LAN
- Supports Embedded Software APIs and utilities

### Software APIs:



### Utilities:



Physical Characteristics	Dimensions (W x D)	304.8 x 244 mm (12" x 9.6")
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## Ordering Information

	Chipset	GbE	COM	SATA	SW RAID	AMT 3.0
AIMB-766VG-00A1E	Q35/ICH9	Single	4	4	None	None
AIMB-766G2-00A1E	Q35/ICH9 DO	Dual	4	6	Yes	Yes

## Riser Card

Part Number	Description
AIMB-RP30P-03A1E	2U riser card with 3 PCI expansion
AIMB-RP3PF-21A1E	2U riser card with 2 PCI and PCIe x16 expansion

## Packing List

Description	Quantity
IDE HDD cable	x 1
FDD cable	x 1
Serial ATA HDD data cable	x 2
Serial ATA HDD power cable	x 2
COM port cable kit	x 2
I/O port bracket	x 1
Startup manual	x 1
Utility CD	x 1

## Optional Accessories

Part Number	Description
1750000334	LGA775 CPU cooler for 4U, 5U, and 7U chassis
1960022033T000	LGA775 CPU cooler for 2U chassis
1960013266T000	LGA775 CPU cooler for ACP-1320 (only for Core 2 Duo)
1700002204	USB cable with dual ports, 27 cm

## Bracket View



AIMB-766VG-00A1E

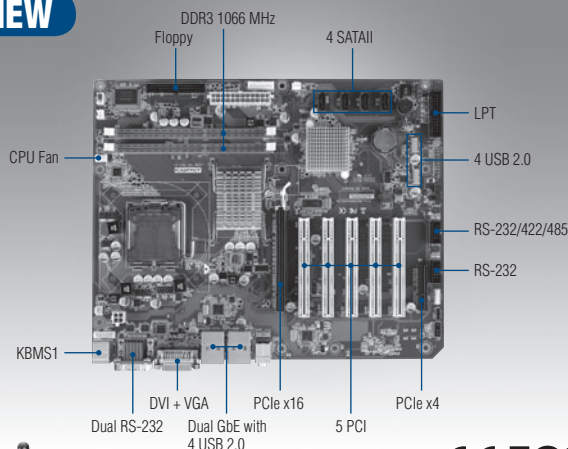


AIMB-766G2-00A1E

# AIMB-767

LGA 775 Intel® Core™2 Quad ATX with  
Dual VGA/DVI, 4 x COM, Dual LAN

NEW



CE FCC

## Specifications

<b>Processor System</b>	CPU (45nm/65nm)	Intel Core 2 Quad	Intel Core 2 Duo	Intel Pentium	Intel Celeron
	Max. Speed	Q9650 3.0 GHz	E8500 3.16 GHz	E6500 2.93 GHz	E1500 2.2 GHz
	L2 Cache	12 MB	6 MB	8 MB	512 KB
	Chipset	Intel G41 + ICH7R			
	BIOS	AMI 16 Mbit, SPI			
<b>Expansion Slot</b>	Front Side Bus	800/1066/1333 MHz			
	PCIe x 16	4.0 GB/s per direction, 1 slot			
	PCIe x 4	1 GB/s per direction, 1 slot			
	PCI	32-bit/33 MHz, 5 slots			
<b>Memory</b>	Technology	Dual channel DDR3 800/1066 MHz			
	Max. Capacity	4 GB			
	Socket	2 x 240-pin DIMM			
<b>Graphics</b>	Embedded	Intel GMA X4500 shared 352 MB system memory			
	DVI	Yes (If DVI is used, PCIe x16 is automatically disabled)			
	Dual Display	VGA + DVI			
<b>Ethernet</b>	Interface	10/100/1000 Mbps			
	Controller	GbE LAN1: Intel 82583V, GbE LAN2: Intel 82583V			
	Connector	RJ-45 x 2			
<b>SATA II</b>	Max. Data Transfer Rate	300 MB/s			
	Channel	4			
	VGA	1			
<b>Rear I/O</b>	DVI	1			
	Ethernet	2			
	USB	4			
	Audio	2 (Line-out, Mic-in)			
	Serial	2 (2 x RS-232)			
	PS/2	2 (1 x keyboard and 1 x mouse)			
	USB	4			
<b>Internal Connectors</b>	Serial	2 (COM3 supports RS-232/422/485 with auto-flow control)			
	Parallel	1			
	SATA	4			
	FDD	1			
<b>Watchdog Timer</b>	Output	System reset			
	Interval	Programmable 1 ~ 255 sec/min			
<b>Power Requirement</b>	Power On	Intel Core 2 Quad Q9400 2.66 GHz FSB 1333 MHz, 2 x 2 GB DDR3 1066 SDRAM			
	Voltage@ Current	+5 V@3.12 A; +3.3 V@0.28 A; +12 V@2.52 A; -12 V@0.24A; +5 VSB@0.6 A			
	Operating	Non-Operating			
<b>Environment</b>	Temperature	0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution			
		-40 ~ 85° C (-40 ~ 185° F)			

## Features

- Intel® G41 chipset supports 800/1066/1333 MHz FSB
- Dual channel DDR3 800/1066 SDRAM up to 4 GB
- Supports dual display, VGA and DVI-D
- Supports dual core and quad core processors with 45nm processing
- Supports SATA RAID 0, 1, 5, 10
- Supports Embedded software APIs and utilities

### Software APIs:



### Utilities:



<b>Physical Characteristics</b>	Dimensions (W x D)	304.8 x 244 mm (12" x 9.6")
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## Ordering Information

Part Number	Chipset	Display	GbE	SW RAID	PCIe x16	PCIe x4
AIMB-767G2-00A1E	G41/ICH7R	VGA/DVI	2	Yes	1	1

## Riser Card

Part Number	Description
AIMB-RP3PF-21A1E	2U riser card with 1 PCIe x 16 & 2 PCI slot expansion
AIMB-RP30P-03A1E	2U riser card for 3 PCI expansion
AIMB-RP10P-01A1E	1U riser card for 1 PCI expansion

## Packing List

Description	Quantity
Serial ATA HDD data cable	x 2
Serial ATA HDD power cable	x 2
COM port cable kit	x 1
I/O port bracket	x 1
Startup manual	x 1
Utility CD	x 1

## Optional Accessories

Part Number	Description
1750000334	LGA775 CPU cooler (115 W)
1960022033T100	LGA775 CPU cooler for 2U chassis
1700008461	USB cable with four ports, 30.5 cm
1700002204	USB cable with dual ports, 27 cm
1700003195	USB cable with dual ports, 17.5 cm
1700008809	Printer port cable kit
1700340640	FDD cable

## Bracket View

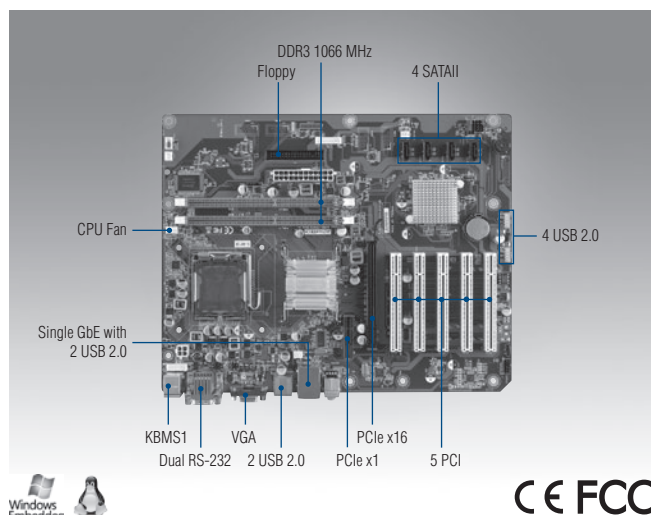


AIMB-767G2-00A1E

- Operator Panels
- Panel Computers
- Display Solutions
- Ethernet Switches
- Device Servers
- Serial Communication Cards
- Video Surveillance
- IPC Chassis
- SBCs and Backplanes
- Industrial Motherboards
- Embedded IPCs
- Server-grade IPCs
- IPC Peripherals
- DAQ Boards
- Signal Conditioning
- USB DAQ Modules
- Embedded Controllers
- PACs

# AIMB-769

LGA775 Intel® Core™2 Quad ATX with  
VGA, 2 x COM, LAN



## Specifications

<b>Processor System</b>	CPU (45nm/65nm)	Intel Core 2 Quad	Intel Core 2 Duo	Intel Pentium	Intel Celeron
	Max. Speed	Q9650 3.0GHz	E8500 3.16 GHz	E6500 2.93 GHz	E1500 2.2 GHz
	L2 Cache	12 MB	6 MB	8 MB	512 KB
	Chipset	Intel G41 + ICH7			
	BIOS	AMI 16 Mbit, SPI			
	Front Side Bus	800/1066/1333 MHz			
<b>Expansion Slot</b>	PCIe x16	4.0 GB/s per direction, 1 slot			
	PCIe x1	250 MB/s per direction, 1 slot			
	PCI	32-bit/33 MHz, 5 slots			
<b>Memory</b>	Technology	Dual channel DDR3 800/1066 MHz			
	Max. Capacity	4 GB			
	Socket	2 x 240-pin DIMM			
<b>Graphics</b>	Embedded	Intel GMA X4500 shared 352 MB system memory			
	Add-on	PCIe x16 slot			
<b>Ethernet</b>	Interface	10/100/1000 Mbps			
	Controller	GbE LAN: REALTEK RTL8111DL			
	Connector	RJ-45 x 1			
<b>SATA II</b>	Max. Data Transfer Rate	300 MB/s			
	Channel	4			
<b>Rear I/O</b>	VGA	1			
	Ethernet	1			
	USB	4			
	Audio	2 (Line-out, Mic-in)			
	Serial	2 (2 x RS-232)			
	PS/2	2 (1 x keyboard and 1 x mouse)			
<b>Internal Connectors</b>	USB	4			
	SATA	4			
	FDD	1			
<b>Watchdog Timer</b>	Output	System reset			
	Interval	Programmable 1 ~ 255 sec/min			
<b>Power Requirement</b>	Power On	Intel Core 2 Quad Q6600 2.4 GHz			
	Voltage@ Current	+5 V@1.75 A; +3.3 V@2.33 A; +12 V@5.01 A; -12 V@0.08A; +5 VSB@0.14 A			
		Operating Non-Operating			
<b>Environment</b>	Temperature	0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution			
		-40 ~ 85° C (-40 ~ 185° F)			
<b>Physical Characteristics</b>	Dimensions (W x D)	304.8 x 244 mm (12" x 9.6")			

## Features

- Intel® G41 chipset supports 800/1066/1333 MHz FSB
- Dual channel DDR3 800/1066 SDRAM up to 4 GB
- Chipset integrated VGA
- Supports dual core and quad core processors with 45 nm processing
- Supports single 10/100/1000 Mbps Ethernet via dedicated PCIe x1 bus
- Supports Embedded Software APIs and utilities

## Ordering Information

Part Number	Chipset	Display	GbE	PCIe x16	PCIe x1
AIMB-769VG-00A1E	G41/ICH7	VGA	1	1	1

## Riser Card

Part Number	Description
AIMB-R4104-01A1E	1U riser card for 1 PCIe x4 expansion
AIMB-R430P-03A2E	2U riser card for 3 PCI expansion

## Packing List

Description	Quantity
Serial ATA HDD data cable	x 2
Serial ATA HDD power cable	x 2
I/O port bracket	x 1
Startup manual	x 1
Utility CD	x 1

## Optional Accessories

Part Number	Description
1750000334	LGA775 CPU cooler (115 W)
1960022033T100	LGA775 CPU cooler for 2U chassis
1700008461	USB cable with four ports, 30.5 cm
1700002204	USB cable with dual ports, 27 cm
1700003195	USB cable with dual ports, 17.5 cm
1700008809	Printer port cable kit

## Bracket View

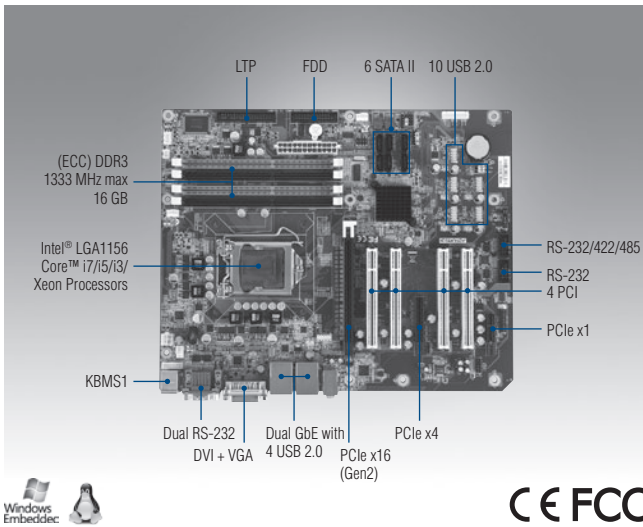


AIMB-769VG-00A1E



# AIMB-780

LGA1156 Intel® Core™ i7/i5/i3/Pentium®/Xeon®  
ATX with DVI/VGA, 4 x COM, Dual LAN, DDR3



## Specifications

Processor System	CPU	Xeon 34xx	Core i7 8xx	Core i5 7xx	Core i5 6xx	Core i3 5xx	Pentium G69xx
	Core Number	4	4	4	2	2	2
	Speed	2.93 GHz	2.93 GHz	2.66 GHz	3.3 GHz	3.06 GHz	2.8 GHz
	Integrated Graphics	-	-	-	Yes	Yes	Yes
	L3 Cache	8 MB	8 MB	8 MB	4 MB	4 MB	3 MB
	Support Model	WG2	QG2	QG2	WG2/ QG2	WG2/ QG2	WG2/ QG2
	Socket	LGA1156					
	Chipset	Q57 for QG2 version; 3450 for WG2 version (WG2 only supports Xeon 34xx, Core i5 6xx, Core i3 5xx, and Pentium G69XX CPUs)					
	BIOS	AMI 64 Mbit SPI					
	PCI	32-bit/33 MHz, 4 slots					
Expansion Slot	PCIe x1	250 MB/s per direction, 1 slot					
	PCIe x4	1.0 GB/s per direction, 1 slot					
	PCIe x16 (Gen2)	8 GB/s per direction, 1 slot					
Memory	Technology	Dual Channel DDR3 800/1066/1333 (Only WG2 SKU supports ECC memory)					
	Max. Capacity	16 GB					
	Socket	4 x 240-pin DIMM					
Graphics	Controller	Intel HD Graphics (Only the Core i5 6xx, Core i3 and Pentium CPUs with dual core are embedded with integrated graphics)					
	VRAM	1 GB maximum shared memory with 2 GB and above system memory installed					
Ethernet	Interface	10/100/1000 Mbps					
	Controller	GbE LAN1: Intel 82578DM, GbE LAN2: Intel 82583V					
	Connector	RJ-45 x 2					
SATA	Max Data Transfer Rate	300 MB/s					
	Channel	6					
	VGA	1					
Rear I/O	DVI	1					
	Ethernet	2					
	USB	4 (USB 2.0 compliant)					
	Audio	2 (Mic-in, Line-out)					
	Serial	2 (RS-232)					
	PS/2	2 (1 x keyboard and 1 x mouse)					
	USB	10 (USB 2.0 compliant)					
Internal Connectors	Serial	2 (1 x RS-232, 1 x RS-232/422/485 for auto-flow control support)					
	SATA	6					
	FDD	1					
	Parallel	1					
	IrDA	1					
Watchdog Timer	Output	System reset					
	Interval	Programmable 1 ~ 255 sec/min					
Power Requirement	Power On	Intel Core i5-660 processor; DDR3 2 GB x 4					
	Voltage@ Current	+5 V@4.23 A; +3.3 V@0.96 A; +12 V@3.93 A; -12 V@0.01A; +5 VSB@1.18 A					

## Features

- Supports Intel® Core™ i7/i5/i3/Pentium®/Xeon® processor with Q57/3450 chipset
- Four DIMM sockets support up to 16 GB DDR3 800/1066/1333
- Supports dual display VGA and DVI and dual GbE LAN
- Supports SATA RAID 0, 1, 5, 10, AMT6.0, TPM1.2 (optional)
- Supports embedded software APIs and utilities

### Software APIs:



### Utilities:



Note: eSOS needs ODM BIOS available by request

Environment	Operating	Non-Operating
	Temperature	0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution -40 ~ 85° C (-40 ~ 185° F)
Physical Characteristics	Dimensions	304.8 x 244 mm (12" x 9.6")

## Ordering Information

Part Number	Chipset	Memory	USB	COM	GbE LAN	TPM
AIMB-780QG2-00A1E	Q57	Non-ECC	14	4	2	Optional
AIMB-780WG2-00A1E	3450	ECC/ Non-ECC	14	4	2	Optional

## Riser Card

Part Number	Description
AIMB-RP10P-01A1E	1U riser card with 1 PCI expansion
AIMB-RP30P-03A1E	2U riser card with 3 PCI expansion
AIMB-RP3PF-21A1E	2U riser card with 1PCIe x16 & 2 PCI slot expansion
AIMB-RP3P8-12A1E	2U riser card with 2PCIe x8 & 1 PCI slot expansion (only for WG2 SKU)

Note: AIMB-RP3P8-12A1E is not compatible with ACP-2010MB chassis.

## Packing List

Part Number	Description	Quantity
1700003194	SATA HDD cable	x 2
1703150102	SATA power cable	x 2
1701092300	COM port cable kit	x 1
1960019193T000	I/O port bracket	x 1
2002078010	Startup manual	x 1
2062078000	Driver CD	x 1

## Optional Accessories

Part Number	Description
1700002204	Dual port USB cable (27 cm) with bracket
1960047669N001	LGA1156 CPU cooler for 4U and wallmount chassis
1960047831N001	LGA1156 CPU cooler for 2U and wallmount chassis
1960049408N001	LGA1156 CPU cooler for 1U and wallmount chassis
1700008809	Printer port cable kit

Note: Purchasing AIMB-780's proprietary CPU cooler from Advantech is a must. Other brands' CPU coolers are NOT compatible with AIMB-780.  
1960049408N001 supports up to Core i5-660 processor.

## Bracket View



AIMB-780QG2-00A1E  
AIMB-780WG2-00A1E

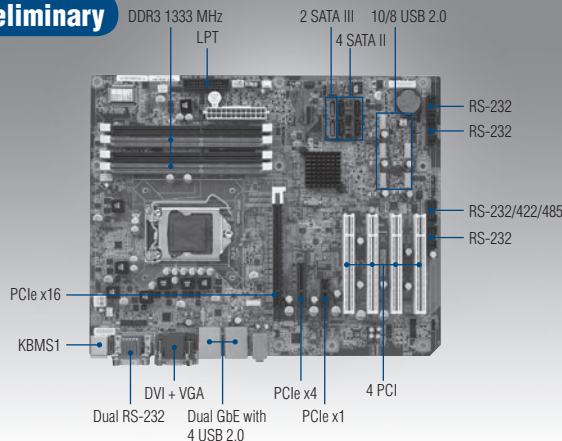
- Operator Panels
- Panel Computers
- Display Solutions
- Ethernet Switches
- Device Servers
- Serial Communication Cards
- Video Surveillance
- IPC Chassis
- SBCs and Backplanes
- Industrial Motherboards
- Embedded IPCs
- Server-grade IPCs
- IPC Peripherals
- DAQ Boards
- Signal Conditioning
- USB DAQ Modules
- Embedded Controllers
- PACs



# AIMB-781

LGA1155 Intel® Core™ i7/i5/i3/Pentium ATX  
with DVI/VGA, Dual Gigabit LAN, DDR3, SATA III

## Preliminary



## Specifications

Processor System	CPU	Core i7 2600	Core i5 2xxx	Core i3 2xxx
	Speed	3.4 GHz	3.3 GHz	3.3 GHz
	L3 Cache	8MB	6MB	3MB
	Socket	LGA1155		
	Chipset	Q67 for QG2 version; B65 for QVG version		
Expansion Slot	BIOS	AMI 64 Mbit SPI		
	PCI	32-bit/33 MHz, 4 slots		
	PCIe x1 (Gen2)	500MB/s per direction, 1 slot		
	PCIe x4 (Gen2)	2.0GB/s per direction, 1 slot		
Memory	PCIe x16 (Gen2)	8 GB/s per direction, 1 slot		
	Technology	Dual Channel DDR3 1066/1333		
	Max. Capacity	16 GB		
Graphics	Socket	4 x 240-pin DIMM		
	Controller	Intel HD Graphics		
	VRAM	1 GB maximum shared memory with 2 GB and above system memory installed		
Ethernet	Interface	10/100/1000 Mbps		
	Controller	GbE LAN1: Intel 82579LM, GbE LAN2: Intel 82583V for QG2 version		
	Connector	RJ-45 x 2 for G2 version		
SATA	Max Data Transfer Rate	600 MB/s		
	Channel	2 for QG2 version (SATA1-2); 1 for QVG version (SATA1)		
	Max Data Transfer Rate	300 MB/s		
Rear I/O	Channel	4 for QG2 version (SATA3-6); 5 for QVG version (SATA2-6)		
	VGA	1		
	DVI	1 for QG2 version		
	Ethernet	2 for QG2 version; 1 for QVG version		
	USB	4		
	Audio	2 (Mic-in, Line-out)		
	Serial	2 (RS-232)		
Internal Connectors	PS/2	2 (1 x keyboard and 1 x mouse)		
	USB	10 for QG2 version; 8 for QVG version (USB 2.0 compliant)		
	Serial	4 for QG2 (3 x RS-232, 1 x RS-232/422/485 with auto-flow control)		
	IDE	-		
	SATA	6 (QG2 version: SATA II x4 and SATA III x2; QVG version: SATA II x5 and SATA III x1)		
	Parallel	1		
	IrDA	1		
	DIO	-		
Watchdog Timer	Output	System reset		
	Interval	Programmable 1 ~ 255 sec/min		
Power Requirement	Power On	Intel Core i5 2400 3.1 GHz; DDR3 4 GB x 4		
	Voltage@Current	+5 V@2.89 A; +3.3 V@1.02 A; +12 V@5.88 A; +5 VSB@5.88 A		

## Features

- Supports Intel® Core™ i7/i5/i3/Pentium processor with Q67/B65 chipset
- Four DIMM sockets support up to 16 GB DDR3 1066/1333
- Supports dual display VGA and DVI and dual GbE LAN
- Supports SATA RAID 0, 1, 5, 10, AMT7.0, TPM 1.2 (optional)
- Supports embedded software APIs and utilities

### Software APIs:



### Utilities:



Note: eSOS needs ODM BIOS available by request

Environment	Temperature	Operating	Non-Operating
		0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution	-40 ~ 85° C (-40 ~ 185° F)
Physical Characteristics	Dimensions	304.8 x 244 mm (12" x 9.6")	

## Ordering Information

Part Number	Chipset	Memory	Display	USB	COM	GbE LAN	iAMT	SATA III	SW RAID
AIMB-781QG2-00A1E	Q67	Non-ECC	VGA + DVI	14	6	2	Yes	2	Yes
AIMB-781QVG-00A1E	B65	Non-ECC	VGA	12	2	1	None	1	None

## Riser Card

Part Number	Description
AIMB-R4104-01A1E	1U riser card with 1 PCIe x4 expansion
AIMB-R430P-03A2E	2U riser card with 3 PCI expansion
AIMB-R4301-03A1E	2U riser card with 3 PCIe x1 expansion
AIMB-R431F-21A1E	2U riser card with 1 PCIe x16 & 2 PCIe x1 expansion
AIMB-R43PF-21A1E	2U riser card with 1 PCIe x16 & 2 PCI expansion

## Packing List

Part Number	Description	Quantity
1700003194	SATA HDD cable	x 2
1703150102	SATA power cable	x 2
1960050472T000	I/O port bracket	x 1
2002078110	Startup manual	x 1
2062078100	Driver CD	x 1

## Optional Accessories

Part Number	Description
1700002204	Dual port USB cable (27 cm) with bracket
1960047669N001	LGA1155/1156 CPU cooler for 4U and wallmount chassis
1700008809	Printer port cable kit
1701092300	COM port cable kit

Note: Purchasing AIMB-781's proprietary CPU cooler from Advantech is a must. Other brands' CPU coolers are NOT compatible with AIMB-781.

## Bracket View



AIMB-781QG2-00A1E



AIMB-781QVG-00A1E